

SRI LANKA: A FUTURE LOGISTIC HUB OF ASIA

A Study Based On Sea Freight Transportation



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Introduction

According to the latest statistics of Sri Lanka Freight Forwarding Association (SLFFA) which is a member of regional freight forwarding body Federation of Asia Pacific Air cargo Associations (FAPAA) and the international freight forwarding body FIATA, it reveals that about 108 freight forwarding companies exist in Sri Lanka. Further, as per the statistics of SLFFA almost 80 percent of the total airfreight imports / exports and 30 percent of the total sea freight exports are moved by forwarders. There are many forwarders who possess the above pre-requisites. There are as many who claim to be forwarders but who do not possess such capabilities. As a shipper it is important to be able to distinguish the “reliable from the dubious”.

It is needless to say all this development provoked the interest of several locally established companies to venture into this field with agency partnerships with well-established forwarding companies like MSAS, AEI, Schemer being actively promoted in the Sri Lanka forwarding industry.

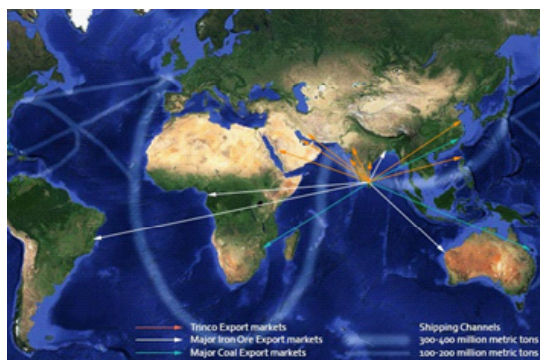
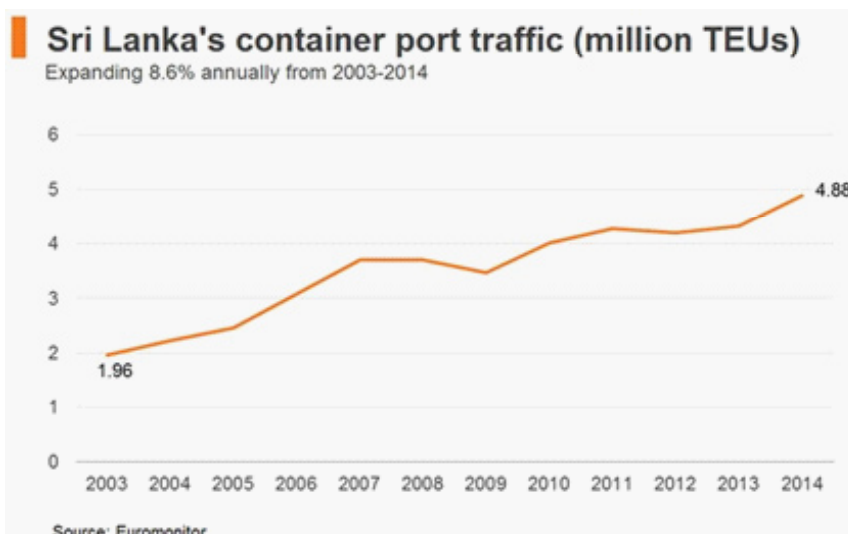


Figure 1: Shipping channels of Sri Lankan ports

Lying on a key East-West trade route and set close to India, Sri Lanka possesses the essential locational advantage needed for it to develop into a key logistics hub in South Asia. Sri Lanka is an economy, with a total trade amounting to about US\$31 billion in 2014 (only 4% of India's US\$778 billion), the island state is an important transshipment hub in the region. It is a site where many shipping companies consolidate and deconsolidate cargo for trans-hipping to other destinations. World Shipping Council statistics show that the Port of Colombo – Sri Lanka's major container port on the west coast – was the busiest port in South Asia in 2015, handling 5.19 million TEUs becoming 28th Position in world ranking in 2015. This puts it ahead of India's largest container port, Jawaharlal Nehru which was a 34th Position in the world ranking (4.49 million TEUs in 2015). In the first 11 months of 2014, the Port of Colombo reported a steady growth of 4.5% in container traffic, according to the Sri Lanka Ports Authority (SLPA). Notably, transshipment volume grew far faster than domestic cargo business during the period, accounting for more than 75% of total container throughput.



Port of Colombo

Colombo Port is a rapidly growing maritime hub of the South Asia Region. Cargo originating from and destined to Europe, East and South Asia, the Persian Gulf, and East Africa is conveniently and efficiently connected through the Colombo Port. It is primarily a container port and amid the growing demand for international logistics services, Sri Lanka has launched the Colombo Port Expansion Project (CPEP). Prior to the project, there were three terminals in the Port of Colombo: Jaya Container Terminal, Unity Container Terminal and South Asia Gateway Terminal, with seven main container berths and four feeder berths.

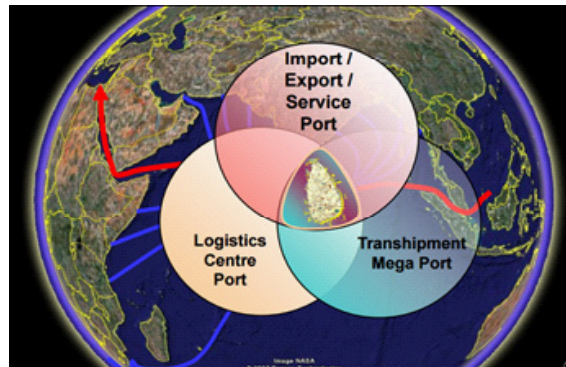


Figure 3: Three main functions of Colombo Port

Following the completion of the CPEP, three more terminals will be available. The first of these, the South Container Terminal (developed by Colombo International Container Terminals Limited, a joint venture (JV) between China Merchants Holdings (International) Co Ltd and SLPA) has already commenced operations. This is the first terminal in South Asia that can accommodate a mega-sized vessel. The SLPA-owned East Container Terminal (ECT) will come into operation in sooner, while the West Container Terminal is still at the planning stage. It is expected that the container handling capacity of Port of Colombo could be increased from slightly more than 5 million TEUs to 12 million TEUs per year, making it one of the world’s largest container ports.

Table 1: Colombo Port terminals and Container Terminal Area

Terminal	Container Terminal Area
Jaye container terminal	45.5 Hectares
Unity container terminal	1.53 Hectares
South Asia gateway terminal	21.87 Hectares
Colombo International container terminal (CICT)	10 Hectares
East Terminal (under construction)	26 Hectares (1st Phase)

Geographic location coupled with competitive pricing strategies has made Colombo the most preferred hub in the region for transshipment.

Table 2: Pricing strategy of Colombo port with other regional ports

Port	Deviation Time (Days ^{**})	Time in Port	Vessel Deviation Time Cost (\$) ^{***}	Fuel Cost (\$) ^{***}	Port Access Charges (\$) ^{***}	Cost of time in Port (\$) ^{**}	Total Marginal Cost (\$)
Chennai	1.10	1.00	24,750	18,840	28,000	22,500	93,730
Chitlagong	2.25	1.00	50,625	37,800	22,500	22,500	130,925
Cochin	0.13	1.00	2,925	2,184	22,500	22,500	56,109
Colombo	0.06	1.00	1,350	1,006	10,000	22,500	34,858
Dubai	2.37	0.50	53,325	39,816	5,500	11,250	109,891
JNPT / NSICT	0.85	1.00	19,125	14,280	26,500	22,500	82,405
Karachi	1.33	1.00	29,925	22,344	20,000	22,500	94,769
Mundra	1.30	1.00	29,950	21,840	28,000	22,500	101,590
Tuticorin	0.09	1.00	2,025	1,512	33,500	22,500	59,537

Notes : All figures in US\$ * At 23 Knots, ** At US\$ 22,500 per day for a 4,000 TEU vessel *** At 120 tpd x US\$ 140/t (Source: Drewry Shipping Consultants Ltd/SAGT)

Port of Hambantota (Magampura Mahinda Rajapaksa Port)

In order to further expand the country’s logistics sector, the Sri Lankan government is developing a new port and economic zone in Hambantota, a southern coastal district. Significantly, the designated contractor for the whole project is a JV between China Harbour Engineering Co and Sinohydro Corporation Ltd. Phase one of the projects has been completed, delivering a port capable of berthing four vessels and a bunkering terminal that started operation in 2014. Also, phase two has already been completed and the current plan is to start the operational activities of it with container terminal with seven berths, to handling containers while a dockyard will be added in third phase. While a vast proportion of the project is still under construction, the Hambantota port has already made good progress, handling a total of 388 ships in 2014 - more than double its 2013 throughput.

Automobile transshipment is currently the main business of Hambantota port. Although Sri Lanka does not manufacture automobiles, Hambantota is now becoming a transshipment hub for finished vehicles. Given its desirable location, augmented by its deep-water port, carmakers from Japan, Korea and India are increasingly using Hambantota as a nexus for transshipping vehicles built in India, Thailand, Japan and China to markets in Africa, the Middle East, Europe and the Americas. According to SLPA, the port handled 254 Ro-Ro vessels (i.e. ships carrying vehicles) in 2014, an 85% increase on the previous year. The total number of motor vehicles handled approached 190,000 in 2014, compared to about 65,000 in 2013. Aside from vehicles, the Hambantota port is also set to become a transshipment hub for a range of other merchandise, similar to the Port of Colombo as it complete the project, the port will cover 4,000 acres (16 km²) of land and accommodate 33 vessels at any given time, making it the largest port in South Asia. In particular, it is looking to service goods manufactured in OEM plants in other Asian production bases.

Foreign Participation: Key to Future Development

Despite heavy public and private investment in infrastructure – long considered an essential “tangible factor” for a logistics hub - Sri Lanka is encountering challenges in terms of “intangible factors”, including access to a sufficient number of qualified professionals and international participants in the field. Not surprisingly, the country’s logistics and transport industry still lags behind a number of the region’s other leading hubs, including Hong Kong, Singapore and Dubai.

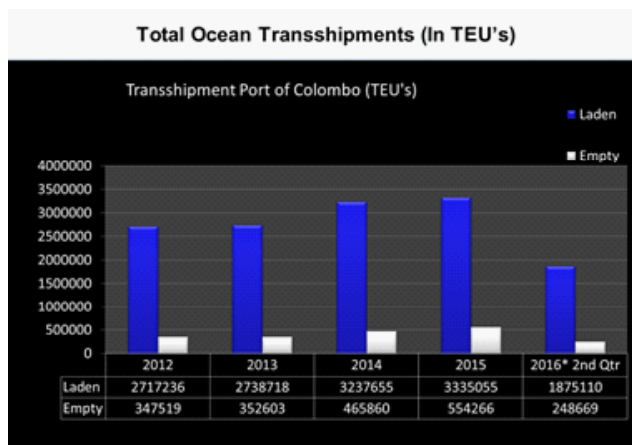
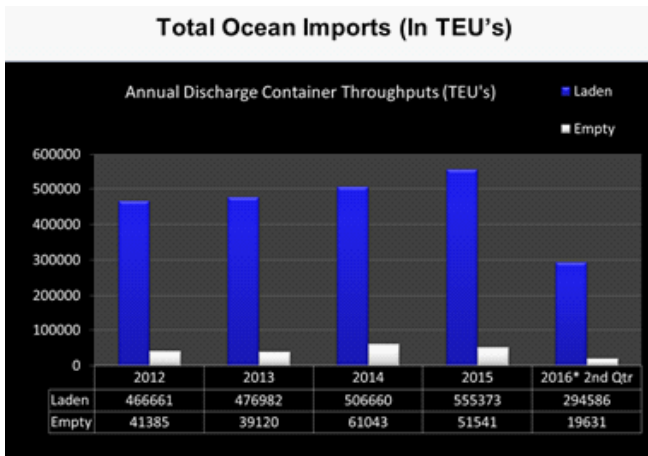
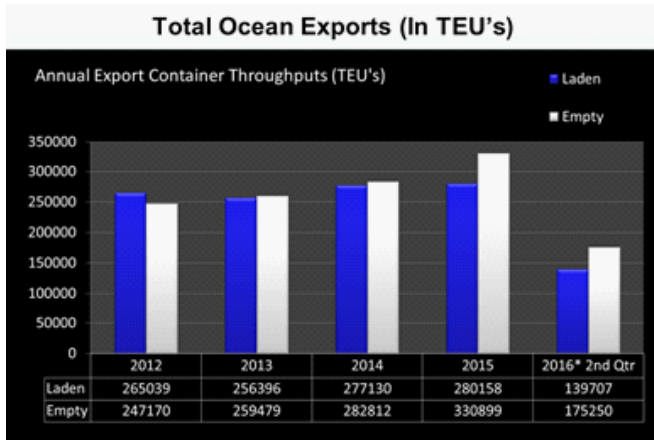
Sri Lanka was ranked 89th out of 160 countries in the World Bank’s 2014 Logistics Performance Indicator (LPI). Notably, Sri Lanka scored 2.70 on competence and quality of logistics services, compared to India’s 3.08, UAE’s 3.54, Hong Kong’s 3.83 and Singapore’s 4.00. This indicates a need for Sri Lanka to improve the quality of its logistics services, as well as a requirement for greater investment in “hardware” - ports, roads and railways. The participation of foreign logistics service suppliers, many of whom could bring in the level of services that meet international standards, is important for the industry’s future development. Currently, the permitted foreign shareholding of a shipping agency in Sri Lanka can be up to 40%, while requests for a larger share has to be approved by the Board of Investment (BOI) on a case-by-case basis.

Port	Shipping Time
Tuticorin, South India	8 hours
Chennai, India	2 days
Singapore	3 days
Mumbai, India	4 days
UAE	5 days
Sydney	11 days
Amsterdam	18 days
New York	21 days

Source: Board of Investment, Sri Lanka

Apart from its locational benefits, Sri Lanka has other advantages likely to appeal to foreign logistics companies. Unlike a number of other developing nations, Sri Lanka seldom experiences port congestion or large-scale industrial unrest. In addition, the relevant costs involved in undertaking international trade in Sri Lanka are cheaper than when carrying out comparable activities among its regional peers. According to the World Bank’s Doing Business Report 2015, the per-container cost for exporting and importing to and from Sri Lanka are, respectively, US\$560 and US\$690 – much lower than the South Asian average (US\$1,923 and US\$2,118) and in Mumbai (US\$1,120 and US\$1,250).

When consider about the total sea freight handling during last five years upto year 2016 2nd quarter Total Ocean Exports, Total Ocean Imports and Total Ocean Transshipments has increased and it's a good sign of sea freight industry in Sri Lanka.



Global challenges in the Sea Freight Transportation

A business that is in operation has got its cycle of boom and recess. These are the periods when the business is doing well and adversely, respectively. Just like any business, the sea freight forwarding industry also has got a share of its own challenges. These are obstacles that hamper the smooth running of the sea freight forwarding industry. Some of the challenges completely stifle the operations of a sea freight industry which forces it to wind up and go out of business. A well-organized sea freight industry should anticipate such challenges and have strategies in place to combat them when they occur. A sea freight forwarding industry that waits for such challenges to manifest themselves before making adequate preparations is contributing to its own failure. Mechanisms need to be in place to cover any unforeseen events that may tend to cripple the business. Following will describe the cotemporary challenges in sea freight transportation.

Environment issues

Container shipping is the most carbon efficient means of transporting most goods across the world. Most of the world's manufactured goods and products travel by container ship, with the containers then transferred to rail or truck to reach their final destination. Containerization has revolutionized the movement of goods and the increased efficiency of moving goods has produced numerous benefits including lower environmental impacts associated with the movement of products from one point to another. However there are some issues environmentally related to sea freight forwarding.

The sea freight is faced by adverse weather conditions which are normally unpredictable. Very strong tides and waves make it almost impossible to conduct sea transport as one would be running the risk of a sinking ship. During such instances, the sea transport has no activity while awaiting calmness to resume.

CO₂ is produced as ships use petroleum based fuels to power both main and auxiliary engines. Maritime traffic accounts for approximately 2.1% of the world's CO₂ emissions and liner shipping accounts for approximately ¼ of the total 2.1% associated with all maritime traffic, while moving roughly 52% of maritime commerce by value.

Large commercial vessels routinely discharge ballast water, grey and black water, bilge water, and other discharges incidental to normal vessel operations. Accidental spills of oil and fuel can also cause significant damage to the environment.

Security issues

The safety and security of ships, cargo and personnel is critically important to the shipping. Maritime piracy is a crime under international law and as such has been a concern to the shipping industry for some time. The piracy crisis in the Gulf of Aden, off the coast of Somalia, and now in the wider Indian Ocean, continues and has raised public awareness of the problem. Furthermore, sea transport has also been hit by the threat of pirates who hijack cargo ship and demand for ransoms before such a ship can be released. This has caused severe losses in the freight forwarding industry which has driven most operators out of business.

Crew members of the shipping line are required to screen prior to precede them to ashore or to sea for identification in order to ensure that seafarers are having the required safety during the passage and to deny the entry of unauthorized personal to that country.

Cargo security is also an important matter because it is required to identify the legality of the cargo moving internationally. In order to avoid the illegal items are not been transferred in internationally through the supply chain.

In recognition of the need for a consistent global approach to maritime security, vessels and ports are required to adhere the international standards and some international security measures' in order to avoid the terrorism activities.

If the importers or the exporters did not comply to the international standards of food safety required by the importing or exporting country, this will lead to a unnecessary congestion in that relevant port, which will incur waste and delays throughout the process .

Safety issues

The safe operation of ships and the safe handling of cargo are core principles for shipping. In addition to focusing on the safety of their own operations, shipping companies need to take steps to protect the public health and safety in the countries they transit.

Accurate cargo weight is an important factor in ensuring the safe operation of ships. Containers that are overweight, meaning that they weigh more than the declared weight provided by the shipper, create safety concerns for the ship, its crew, other cargo on board and the workers in the port facilities handling the cargo.

Containers utilized by the liner shipping industry are constructed according to the International Convention for Safe Containers. These containers also meet more stringent standards regarding structural integrity and container strength, which are developed by the industry through the International Standards Organization (ISO). If not comply with this standards it will be an issue.

Since, seafarers spend a significant percentage of their lives at sea, they invariably acquire illnesses from time to time. It is important that seafarers receive medical attention and be appropriately quarantined, when absolutely necessary, to ensure that illnesses are not spread to other crewmembers or to the public.

Infrastructure

Sufficient land-side capacity to keep cargo moving is essential for shipping in order to maintain their schedules. Supply chains served by shipping vessels in 21st century are no longer port-to-port. All cargo carried on ships must be able to discharge the vessel in a timely manner at port facilities around the world.

Further, this cargo will also have to move via truck or rail on its journey from origin to destination. An intermodal network is comprised of ships, trains, planes and trucks, including the surface over which they move and the connections or transfer points between the modes, often referred to as intermodal connectors. Service disruption or insufficient capacity anywhere in the network could result in shipment delays and increased cost and which will impact to the productivity.

In late 2014, and in early 2015 port congestion, particularly on the busiest ports received significant attention and concerns mounted about the potential economic impact of congestion issues that went unaddressed. Figure 5 display how its impact throughout the process.

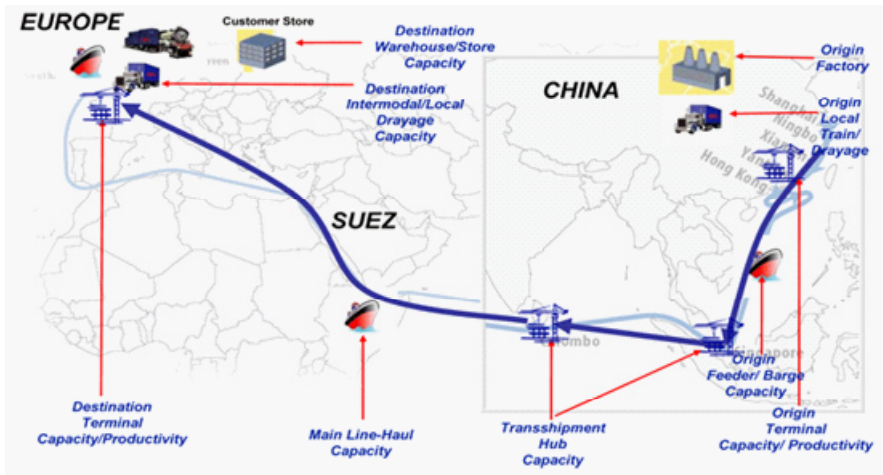


Figure 5: Impact of Congestion issues in year 2014 & 2015

Economic Issues

This includes setting funds aside to cater for emergencies and risks which cannot be predicted with certainty. Challenges facing the sea freight forwarding industry include the following.

Fuel price increase has been a major factor that has adversely affected the sea freight industry. Increase in fuel means an increase in the operating costs of the business. However, a sea freight forwarding company cannot be increasing its freight rates each time there is an increase in fuel prices. This would brand a company to be very unreliable and unnecessarily expensive. This means that a sea freight company has to balance between stabilizing the freight rates and making profits at the same time. The price set therefore has to cater for all expenses and leave some profit in the end. If the set freight rates are high, one would lose customers due to stiff competition that prevails in the sea freight forwarding industry. Increase in fuel therefore poses a major challenge to the sea freight industry as all of their vessels are powered using fuel.

The credit crunch has had a negative impact on the sea freight forwarding industry. This has led to reduced activity in terms of trade hence a low season for sea freight companies. During the economic crunch, the level of trade significantly reduced across national borders meaning that there was little that could be transported from one country to another.

This was worsened by the weakening of the dollar meaning that the sea freight forwarding industry had to receive less in terms of payments advanced to them by their customers. If the price for a certain consignment was fixed at a certain price, the weakening dollar impacted negatively on the exchange rate to those who conducted business internationally.

Apart from those major challenges, other challenges included with followings;

- a. There has always been felt greater need for visibility in all of the inbound and outbound processes/ visibility in sea freight control on a global basis.
- b. Constant revenue leakage stemming from inaccuracy in processes (or because of the inaccuracy in capacity and pricing)
- c. Making use of the manual processes in order to manage sea freight operations.
- d. Outmoded legacy systems that are weakening customer relationship or leading to weak customer response or customer service.
- e. Inflexibility in business rules or workflow making it more time consuming and expensive for the sea freight enterprises.

Conclusion

Given the limited size of Sri Lanka's domestic market, targets set by the government on export growth cannot be met without a significant improvement in export performance. Both export product categories and destinations need to be diversified. A concerted effort to plug into Asian supply chains will also be particularly important. At a time when the global economic center of gravity is shifting from West to East, Sri Lanka needs to address a situation where 60% of its exports are directed to the sluggish markets of Europe and North America and less than 10% to the dynamic markets in China and India. These two countries now contribute more than half to global growth. Improving the investment climate, particularly in the tradable goods sector, would be essential to achieve the desired export growth.

Sri Lanka's LPI ranking also reflects logistics related problems with both road and rail infrastructure. These include congested road access to the Port of Colombo and the poor quality of trucking and rail services. Both trucking and rail costs exceed those in Bangladesh and India. The railway sector accounts for only about one percent of freight movements and is characterized by a large cost structure. In addition, the logistics sector has been slow to provide value added services for transshipment through the Colombo port. The government can encourage this by providing free zones and customs procedures that will enable services to be provided efficiently. Failure to do this can make Colombo vulnerable to losing market share to Indian ports that are being upgraded, particularly as pure transshipment cargo is foot-loose. Colombo's ability to maintain its competitive position in relation to other regional hubs, and increasingly efficient Indian ports, will also depend on its ability to replicate the level of efficiency attained by the South Asian Gateway Terminal (SAGT) in the operations run by the Sri Lanka Ports Authority and the new facilities being constructed in the South Harbour.

Sri Lanka's major exporters, particularly apparel manufacturers, have been successful in circumventing the challenges posed by the country's poor logistics performance. Manufacturers have demonstrated the ability to reduce the time and cost of export production, while increasing reliability. However, the logistics sector has not been similarly proactive in developing supply chain solutions that can increase competitiveness by reducing delivery time and driving down total supply chain costs. Improving the domestic component of supply chains is important towards achieving this objective. However, the relatively small size of the economy and the concentration of GDP in the Western province impose some limits in this regard. As a result, even greater benefits can be derived by restructuring the international components of supply chains so that value can be captured local.

Improving Sri Lanka's logistics performance requires concerted action by both government and the private sector. At present the Western Province accounts for about 50% of GDP around the Colombo Port and the Bandaranaike International Airport. The government's programme of road, ports and airports development is designed to support more balanced growth across the regions. In rolling out these programmes, a holistic approach should be adopted to infrastructure provision and improved logistics for exports. Equally, the private sector needs to be more proactive in providing logistics solutions that enhance export competitiveness.

Significant improvements in domestic and international connectivity would need to be planned for and implemented if exports are to drive accelerated growth in Sri Lanka. In a world of increasing competition and tightening margins, improving logistics performance is an important element of strengthening the country's competitiveness.

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