

Importance of the Logistics Industry in South Africa:

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<u>Overall Measuring Index:</u>			
% of GDP	Risk indicator, in terms of COVID-19	Digitalization	People employed
15-25%	Low	75%	± 375 000
Strategic Impact	Regional alignment	Support to Essential Sectors	Mechanically handle
Very important	Very important Hub for Landlocked countries, leader in AU for 2020	Key player in Value Global Chains	85%
Readiness			
Masks	Testing	Social distancing	Training
100%	50%	80%	60%
Overall Index:			

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About this paper

This paper contains an overview of the logistics industry in South Africa. The aim of the paper is to highlight the importance of the industry during this critical time of national disaster. As the International Maritime Organization (IMO) explained in its circular letter No. 4201/Add.6 dated 27 March, *“it is vital that Governments facilitate the continuing operation of shipping and ports under their jurisdiction to allow the transport of marine cargoes so that supply chains are not disrupted and to allow the global economy, and society as a whole, to continue to function throughout the pandemic”* ([IMO](https://www.imo.org)).

To facilitate this aim, the contents is as follows: **(1)** The logistics industry in South Africa; **(2)** How the logistics industry supports the different sectors in South Africa; **(3)** Risk profile per category; **(4)** Complexity, handover and linkage in the supply chain; **(5)** Main activities performed in a supply chain; and **(6)** Conclusion.

1. The logistics industry in South Africa

a. Different role players within the industry

The following table outlines the role players within the logistics industry:

Table 1 - Logistics industry role players in the extended supply chain

Role player	Industry body
Sea freight:	1. SAASOA
Terminals:	2. Private 3. Government
Depots:	4. SAAFF 5. SAASOA 6. Other privately-owned facilities
Warehouses (Storage facilities):	7. Intermediators 8. Owners of Supply Chain 9. Government
Air & Courier:	10. Air Line 11. De-Grouping 12. SAEPA
Freight Forwarders & Customs Brokers:	13. Customs Brokers 14. SAAFF
Transporters / Long Distance:	15. Transporters 16. RFA 17. Harbour Carriers

The above role players in the extended supply chain are supported by the Financial Service Industry principally in insurance and banking.

b. Collective contribution to the GDP

International trade has formed a focal point of global economic activity over the last 50 years, increasing from approximately 26% of GDP in 1969 to almost 60% of GDP in 2019 ([World Bank](#)). For international trade and global supply chains to continue to flourish, they need the support of a properly functioning transport and logistics industry.

i. Internationally

According to Shepard ([source](#)), the transport and logistics industry amounts to approximately 11% of global Gross Domestic Product (GDP). This is when considering the industry by means of a 'medium' definition. For reference purposes, the narrow definition of logistics limits the sector to transport and related activities; the medium definition includes addition wholesale trade, which captures the core distribution activities. The broad definition also includes retail trade, in order to cover a wider range of distribution activities.

ii. Domestically

The logistics industry contributes approximately 10-12% of the GDP ([Market Insights; Business Tech](#)), experiencing a 4.4% retraction in Q4:2019. However, the estimated contribution of R274 billion is probably far closer to R480 billion when considering a broader definition to include sub-sectors such as warehousing, road freight and even pipeline volumes, many which are often not categorised as logistics. When considering a 'broader definition' as outlined above, the figure is closer to 20% of the GDP in South Africa. Transport costs are the dominant contributor towards logistics costs, amounting to 57% of the total, followed by inventory carrying costs (15.2%), warehousing (14.6%) and management and administration costs (13.5%).

2. How the logistics industry supports the different sectors in South Africa?

The industry is rooted in many other sectors, serving as a 'feeder-network' to a plethora of industries, especially retail, agriculture, manufacturing, etc. For example, when major retailers like Shoprite or Pick 'n Pay transport and store goods, the transported volumes are listed under the retail category. Furthermore, without transport and logistics, the basic economic principles of supply and demand cannot be met since producer and consumer are far-removed in the inter-connected world of the 21st century.

3. Risk profile per category:

The following matrix showcases the risk in supply chain movements which supports essential services and sectors needed to operate during the period of national lockdown:

Table 2 - Risk profile matrix per sector

#	Description	Measurement	Risk in spreading: COVID-19			Importance to local economy	Ratio: Activity & People	Mitigation strategy		
			Low	Med	High			PPE	Social distancing	Digitalization
1	Product Mix (Depends on complexity), - 12 independent operators woven into a matrix of complexities	Import, Export, Manufacturing, Global Value Chains: Port, Terminal, Licensed facilities, Storage facilities, Modalities: Road, Air, Sea, Train: Import/Export: Local & Cross Border Movement	✓			High	Mechanically handled (80%/20%)	✓	✓	✓

2	Channels of distribution	Channels are the pathways through which customers gain access to products or services				High	Mechanically handled (80%/20%)	✓	✓	✓
3	Service Emphasis	Customs Clearance, arrangement, liaison, tracking & planning	✓			High	Electronic decision cycles	✓	✓	✓
4	Procurement / Sourcing	Allow the flexibility as the intermediaries move the cargo	✓			High	Electronic decision cycles	✓	✓	✓
5	Production	For manufacturing that is carried out - in-house, we need to ensure a constant sustainability in the movement of cargo to avoid costly stoppages		✓		High	Mechanically handled (80%/20%)	✓	✓	✓
6	Capacity consideration	Capacity can come in many forms from the extended supply chain (inventories, storage locations, and transportation options)	✓			Medium	Comparative analysis; support and execution	✓	✓	✓
7	Fulfilment approach	The physical delivery of products and services. End customers shared services to drive cost down to meet unpredictable situations	✓			Medium	Comparative analysis; support and execution	✓	✓	✓
8	Relationship intensity	Support essential		✓		High	Execution strategy	✓	✓	✓

		services sectors								
9	Resource allocation priorities	Adopt to current trading conditions		✓		Medium	Multiple supply chain configuration	✓	✓	✓
10	Strategic Risk profile			✓		High	Misalignment ; stop performance of essential sectors	✓	✓	✓

Since South Africa will adopt a risk phased approach (with different levels of lockdown) from the 1 May 2020, the following table indicates what activities are permitted in terms of the logistics industry (“Transport, storage and communication services”; and “Supply chains”) with respect to the different levels:

Table 3 - Activities allowed under lockdown

LEVEL 5	
J. Transport, storage and communication services permitted:	
<ol style="list-style-type: none"> 1. Rail, ocean and air transport permitted only for the shipment of cargo; 2. Taxis, buses, e-hailing services subject to restrictions on capacity and times, and for permitted activities only; and 3. Transport and logistics in respect of specific cargo, and permitted retail goods to neighbouring countries, which shall include all goods imported via SA ports of entry, for re-export to neighbouring countries 	
M. Supply chains:	
<ol style="list-style-type: none"> 1. Production, manufacturing, supply, logistics, transport, delivery, critical maintenance and repair in relation to the rendering of permitted services including components and equipment; 2. All workplaces or premises must have care and maintenance that is essential to the prevention of the destruction or significant impairment of working areas, plant, machinery or inventory, or to permit orderly shutdown arrangements, on such conditions as may be issued by means of directions by the relevant cabinet members 	
LEVEL 4	
J. Transport, storage and communication services permitted:	
ADDITIONS OF:	
<ul style="list-style-type: none"> ➤ Public rail, minibus taxi and bus services will resume at levels and on terms as will be set out in Directions, based on the progressive increase in commuter numbers during the various phases; ➤ Essential imported goods will be prioritised through ports of entry and for transport and handling to final users. Directions will be issued in respect of other goods 	
M. Supply chains:	
NO ADDITIONS	
LEVEL 3	
J. Transport, storage and communication services permitted:	
ADDITIONS OF:	
<ul style="list-style-type: none"> ➤ Limited domestic air travel, with a restriction on the number of flights per day and authorisation based on the reason for travel and subject to the ports of entry arrangements 	
M. Supply chains:	
NO ADDITIONS	
LEVEL 2	
J. Transport, storage and communication services permitted:	

ADDITIONS OF:

- Limited domestic air travel, with a restriction on the number of flights per day and authorisation based on the reason for travel and for business travel and subject to the ports of entry arrangements

M. Supply chains:

NO ADDITIONS

LEVEL 1

J. Transport, storage and communication services permitted:

ADDITIONS OF:

- All air travel permitted;
- All ocean transport permitted;

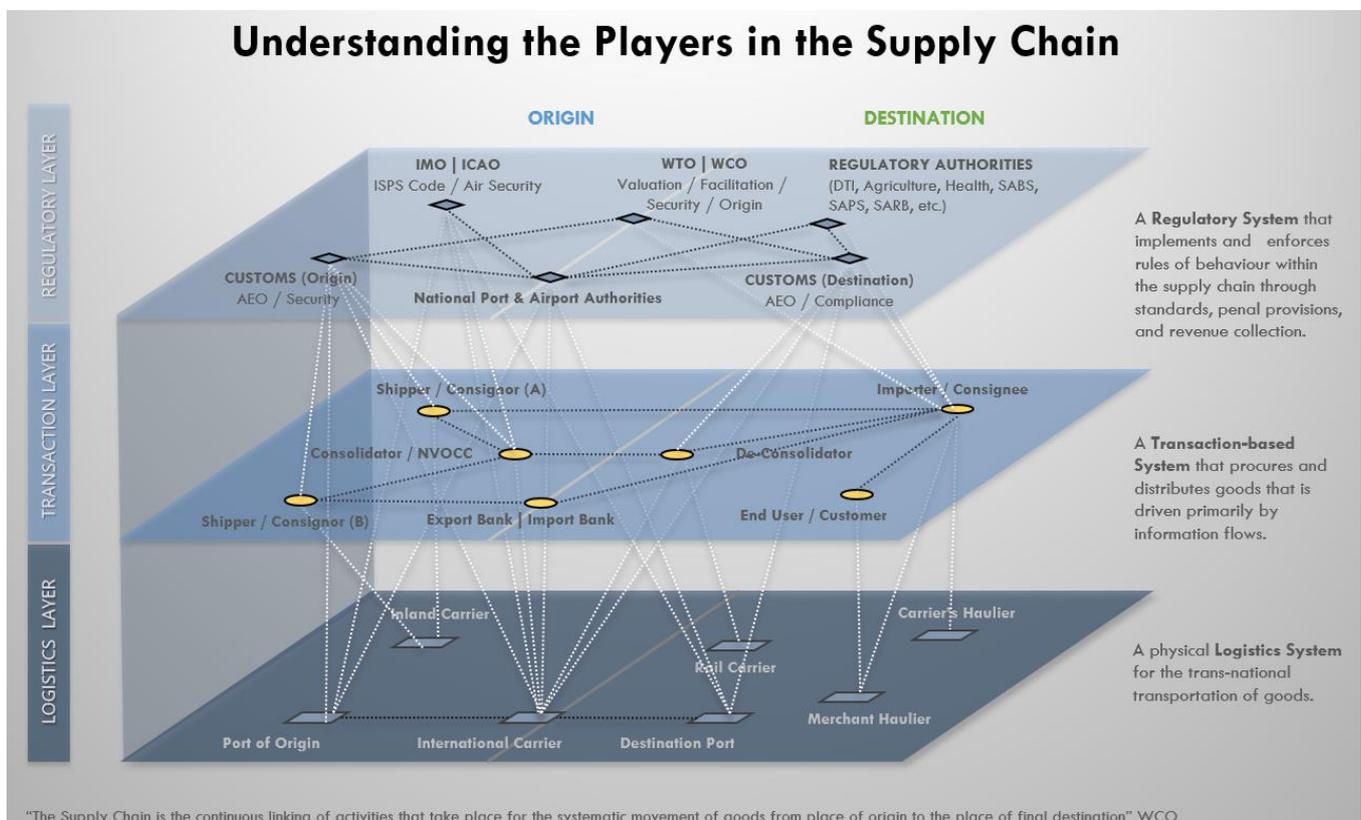
M. Supply chains:

NO ADDITIONS

An amended table of the above containing industry recommendations will be sent as a separate annexure as requested in the submission. The reasons being that the table under “J. Transport, storage and communication services permitted” and “M. Supply chains” does not allow for the movement of cargo and does not articulate the daily practical execution for the role players in the extended supply chain.

4. Complexity, handover and linkage in the supply chain:

Figure 1 - Supply chain with its linkage



The logistics industry — an essential service sector under COVID-19 — requires a complete service that is rendered by sea, air, road and rail modality with a number of inter-linkages. Therefore, a great level of complexity exists with many handover points linking various activities throughout the entire end-to-end supply chain.

The supply chain is to optimize business value of each sector in the economy by ensuring the product reaches the end-user in the most effective way.

What is clear is that the economic, environmental and societal issues are bound tightly together in deeply dependent relationships.

5. Main activities performed in a supply chain:

➤ Import leg

The industry subsequently links a vast network of nodes, all of which are some form of processing point or dispensing point of service. These nodes (i.e. where all of the activities take place) usually tie into an information network of different interlinkages ranging from:

1. Pick up at point of origin (Origin Hubs)
2. Customs Clearance at origin
3. Booking of cargo
4. Packing of cargo
5. Transport of cargo (air, sea, road or rail)
6. Arrival in South Africa
7. Customs Clearance at destination (in the cloud, as this is all electronic via the SARS-EDI gateway)
8. Release from the Releasing authority, payment of all charges
9. De-consolidation of cargo
10. Movement to the licensed depot, storage facilities or intended destination (Essential service, therefore Essential goods)
 - a. Rail; long-haul by Road
11. De-stuff cargo method (de-consolidate)
12. Place in storage
13. Send empty packing unit back to Licensed facilities (FCL, air pallet)

➤ Export leg

1. Fetch cargo; or deliver cargo to consolidated hubs.
2. Prepare for exports (labelling, consolidation, etc.)
3. Customs clearance at origin (Digital)
4. Pack and seal cargo
5. Transport to exit point
6. Load cargo (per modality: Air, Sea, Road, Rail)
7. Official departure

➤ **Each of these legs contains:**

1. Planning
2. Customs Clearance
3. Inspections when dictated by Authorities
4. Packing, sealing of cargo
5. Conveyance to exit or entry point
6. Loading per modality
7. Off-loading, de-stuffing
8. Storage
9. Final delivery

➤ **Impact**

The globalization of supply chain operations is well established for the leading players in several industries, for example: medical supplies, high technology and other important sectors.

What to do:

Learn from the experience obtained in terms of the shortage of critical supplies through the total lockdown from 26 March 2020 – 30 April 2020. The supply chain simply cannot stand still at this critical juncture, nor is it possible to cherry pick which goods can move and which goods cannot move. The supply chain operates like a cohesive entity. Disruption in one node has a complete ripple effect on all of the other nodes. The experience of the lockdown period shows how this results in untimely delays and bottlenecks.

i. Port, Terminal, storage congestions:

- Supply chains handle the entire movement of goods and do not arbitrarily distinguish between ‘Essential’ and ‘Non-essential’ goods
- Closely monitor the zones, since cost to the end-customer is increasing due to the interruption in lockdown of Full Container Loads
- Over time, ‘Non-Essential’ cargo will become ‘Essential cargo’
- The solution?
 - Shift into a higher-priority box and clear the supply chains movement to allow agility and sustainability for the critical medical supplies. This can be achieved without compromising physical contact and social distancing protocols

➤ **The following is imperative**

1. Adopt a holistic, extended supply chain mindset, therefore managing the entire supply chain operations in an integrated synergistic approach
2. Encourage full collaboration with Business and its role players in the extended supply chain
3. Enhance the role of knowledge in managing and deploying more intelligent supply chain solutions
 - a. Identify and implement the “Best practice” around the work, since compliance and trade facilitation complement each other. Medical protocol can be strictly observed in this process.

➤ Personal Protective Equipment (PPE)

The following steps must be taken by all employees and their employers operating within the transport and logistics industry during the state of national disaster as created by the spread of COVID-19:

1. Each company/employer deemed involved in essential services has to ensure proper training and practical workshops for employees, focusing on the correct way of wearing protective gear, the correct way of washing hands with soap and water/alcohol based hand sanitizer and the risks of not obeying the rules.
2. The disposal and control of the protective wear is equally important and without proper control - more harm than good will be done.
3. Each company can supply their employers with 2x masks, each sealed separately:
 - a. The first mask is to be put on that day under supervision and the employee will wear that mask for that day until they get home and put the mask into the issued bag, then the employee must shower/wash.
 - b. The next morning the employee must put on his 2nd issued (clean) mask to travel to work including wearing it on public transport to keep him/her safe.
 - c. On entering his work environment - the employee must first go to a "control member" where he/she puts the used mask from the previous day in a sealed/one-way deposit container and is then issued a mask for the next day.
 - d. The mask may only be taken off during teatime and during eating; for the remainder of the time the masks must be utilised.
 - e. The mask must cover the nose and mouth as per the training.
4. Then the employee will be issued with the day's protective wear, e.g. goggles, coveralls, gloves, etc. (depending on the work conditions) to be worn during the day. This will be taken off at the end of shift and placed in sealed boxes/under supervision. For this, an electronic chip can be used to control; and monitor disposal of the protective clothing & equipment in a secure disposable box. The employee gets his/her chip back on presenting it the next day a new set of equipment for the day will be issued in the workplace.
5. Eye protective wear can be properly washed with soap and water and disinfectant for reuse, if disposable wear is not provided.
6. Tea breaks and lunch breaks must be staggered; therefore, only a limited amount of staff may eat at a given time, preferably as few as possible if it is not possible to give each employee a break in solitude.
7. Communal break rooms should be avoided and socializing minimized.
8. Regular cleaning of communal spaces should be more frequent due to the risk of COVID-19 remaining on contact surfaces. Research has shown the virus can survive for up to 15-17 hours.
9. Paperwork should be minimized and only be done by a selected few, since COVID-19 stays active and alive for 8 hours on paper.
10. The potentially contaminated masks and protective overalls should be accounted for on every level and well controlled with log books and destroyed as medical waste.
11. Every work area should have multiple areas for washing or disinfecting of hands. Reminders to wash or disinfect should also be plentiful.
12. If any worker/employee has flu-like symptoms; he/she must be isolated and if he/she is found to positive for COVID-19; he/she should be isolated for at least 14 days.

13. Keep a safe distance between employees: a range of between 2-3 metres is regarded as 'safe', since droplets can easily spread up to 2 metres.
14. The medical waste/protective wear and masks should be collected and managed in a similar controlled manner as is practised in hospitals in order to minimize the risk of further spreading.

➤ Social distancing

The guidelines on social distancing, as published by the National Department of Health ([source](#)) remains relevant at all times for individuals operating within the transport and logistics industry. However, in essence the following matters are of significant importance:

- Limit the frequency of face-to-face contacts during pickups and deliveries
- Limit casual (social) interactions that normally occur at work
- Do not report to work if you are feeling unwell or sick
- Schedule staggered break times
- Establish flexible work hours or an alternative delivery schedules
- Use text messaging and personal mobile phones to communicate instead of face-to-face contact
- Avoid conferences and group gatherings during a pandemic

For long-haul drivers, avoiding places where other people congregate (such as truck stops) is one example of using social distancing. Another is maintaining separation (again, at least a metre) when in dispatch areas, locker rooms, while refuelling, during pickup and deliveries, and when working in an area where there is likely to be a group of people.

➤ Sanitization

For the entire logistics industry, sanitization protocols will be followed.

World Health Organisation Guidelines			
nr	Heading	Enforcement	
		Yes	No
1	Wash your hands frequently	<input checked="" type="checkbox"/>	
2	Maintain social distancing	<input checked="" type="checkbox"/>	
3	Avoiding touching, eyes, nose and mouth	<input checked="" type="checkbox"/>	
4	Practice respiratory hygiene	<input checked="" type="checkbox"/>	
5	Fever, cough, difficult breathing - seek medical care	<input checked="" type="checkbox"/>	
6	Stay home, if you feel unwell	<input checked="" type="checkbox"/>	

6. Conclusion

This paper contains an overview of the logistics industry in South Africa. The aim of the paper is to highlight the importance of the industry during this critical time of national disaster and covers: **(1)** The Logistics industry in South Africa; **(2)** How the logistics industry supports the different sectors in South Africa; **(3)** Risk profile per category; **(4)** Complexity, handover and linkage in the supply chain; **(5)** Main activities performed in a supply chain; and **(6)** Conclusion.

Logistics is essential to ensuring a life and livelihood in a post-COVID-19 South Africa and presently serves as one of the key *industries* in combatting the spread of the virus.

This paper highlights the critical role of the logistics industry and the need for it to operate at full capacity to avoid bottlenecks and disruptions to the supply chain that will impact on society at large. It also suggests ways in which this can be achieved whilst at the same time minimising the risk of further spreading of the virus.