**UNIVERSITY OF KWAZULU-NATAL**

# EXPLORING THE IMPLEMENTATION OF THE NEW CUSTOMS ACT ON THE ROAD CONGESTION FROM THE PORT OF DURBAN

**By**

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**ABSTRACT**

Customs clearance of goods and subsequent conveyances for import, export or transit is a key compliance that aligns various governmental bodies and industry stakeholders involved in international cross-border trade. In the Republic of South Africa, this function falls under the control of the South African Revenue Services (SARS). Up to this point, the clearing of goods in the ports by the Customs department of the South African Revenue Services (SARS) in South Africa has been conducted in line with the regulations of the Customs and Excise Act of 1964. A major restructuring of this legislation has been done on this Act which will ultimately be known as the Excise Act and two new Acts have been promulgated. These are the Customs Control Act 31 of 2014 and the Customs Duty Act 30 of 2014. The Acts are largely aimed at addressing the needs of trade facilitation.

In 2014 the Customs Control Act 31 and the Customs Duty Act 30 were signed into law. The relevant rules on these Acts were circulated for public comment and are available on the website of SARS. It follows then, that all the clearing of goods imported, will be conducted in compliance with the new Customs Control Act. The compliances under this Act are representative of measures which are different and in contrast to those of the Customs and Excise Act 91 of 1964.

The aim of this paper is to explore the implementation of the Customs Control Act 31 of 2014 and to ascertain its potential impact on the congestion of the roads by trucks carrying containers from the Durban Container Terminal and the flow of containerised traffic to various destinations in the hinterland. This Act is designed to comply with the provisions of the World Customs Organisations (WCO) and the Revised Kyoto Convention (RKC)which sets out guidelines regarding effective customs administration in the modern times of international trade. These include simplified formalities and procedures of border control, standardised documents, risk management, risk analysis and management interventions and audit-based controls. The objective of this convention is aligned to the SAFE framework of standards designed to promote and facilitate legitimate trade and provide security of the international supply chain across all modes of transport.

The researcher adopted a qualitative research approach to answer the research questions. Document analysis was deemed appropriate due to the nature of the study. The two pieces of legislation were compared based on their provisions regarding customs clearance of containerised cargo in the country. The results from the study show that most significant change between the two Acts is the changes in the place for performing customs clearing formalities. The study also found that additional containers will be transported on the already congested roads in the Port of Durban precincts as a result of the termination of the cargo manifest at the seaport. The role of the country's inland ports in easing congestion in the port will also be diminished as they are not designated as places of entry in the country for customs clearance purposes under the Customs Clearance Act 31 of 2014.

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## ACRONYMS

| | |
|---|---|
| ATF | : Agreement on Trade Facilitation |
| BELN | : Botswana, Eswatini Lesotho and Namibia |
| BRICS | : Brazil, Russia, India, China and South Africa |
| CBD | : Central Business District |
| CCA | : Customs Control Act 31 of 2014 |
| CCB | : Customs Duty Bill |
| CDA | : Customs Duty Act 30 of 2014 |
| CDB | : Customs Duty Bill |
| CEA | : Customs and Excise Act 91 of 1964 |
| DCT | : Durban Container Terminal |
| DDOP | : Durban Dig-out Port |
| DHCA | : Durban Harbour Carriers Association |
| DoT | : Department of Transport |
| GATT | : General Agreement on Tariffs and Trade |
| EDA | : Excise Duty Act |
| ESA | : East and Southern Africa |
| EMA | : eThekwini Municipal Area |
| HS | : Harmonised Commodity and System |
| HVGs | : Heavy goods vehicles |
| KZN | : Kwa-Zulu Natal |
| NDP | : National Development Plan |

| | |
|---|---|
| OECD | : Organization for Economic Co-operation and Development |
| RKC | : Revised Kyoto Convention |
| RSA | : Republic of South Africa |
| SAAFF | : South African Association of Freight Forwarders |
| SACU | : Southern African Customs Union |
| SADC | : Southern African Development Community |
| SAFE | : Standards to Secure and Facilitate Trade |
| SAPS | : South African Police Services |
| SARS | : South African Revenue Service |
| SMMEs | : Small Medium and Micro Enterprises |
| TFR | : Transnet Freight Rail |
| TNPA | : Transnet National Ports Authority |
| TPT | : Transnet Port Terminals |
| TEUs | : Twenty Foot Equivalent Unit |
| WCO | : World Customs Organization |
| WTO | : World Trade Organization |

# CHAPTER 1: INTRODUCTION

## 1.1. Introduction

In South Africa, the Customs and Excise Act (CEA) 91 of 1964 regulates the customs functions. This legislation falls under the jurisdiction of the South African Revenue Services (SARS). According to this legislation, the country's inland ports like City Deep in Johannesburg, have the status of the seaports with full customs clearing and forwarding mandate. Containerised cargo is imported to or exported from the inland ports to any foreign port on the basis of a single document, called a cargo manifest[1]. This one-document operation has played an important role in alleviating truck congestion in the Port of Durban over the years (Nevin, 2016b).

Over the years of its existence, the CEA has not been able to adequately adapt to the changing focus of customs responsibilities and the evolving international trade environment, especially the developments in computer technology and electronic data handling. The CEA, in its current structure does not lend itself to be able to address potential risks in international trade (SARS, 2013). These include the transportation of illicit and / or dangerous goods into the country without being identified beforehand. Furthermore, cross-border travellers and the sea trade industry have always found it not to be aligned to their needs. (Goodger & Marais, 2013)

The CEA provides for the levying of customs and excise duties and other taxes such as fuel levies, Road Accident Fund levies, environmental levies and air passenger tax. In order to facilitate the administration and collection of these taxes, the Act prescribes and extensive system of customs control concentrating on the import, export, manufacture and use of goods. This Act may be justifiably be said to be outdated and not passable for the appropriate monitoring and control of the import and export of certain goods in South Africa. This is due to the fact that there is constant developments in technology and a lot has changed in over the fifty years in which it had been enacted. (Peterson, 2017)

The Customs Control Act (CCA) 31 of 2014 was gazetted to replace the CEA. Extensive work has been conducted, including several workshops held by the SARS legal team, with

[1] A document carried by a master of the ship or delegated official clearly stating the type and quantities of various cargo on board the vessel and its destinations as well as the relevant consignee/s

key stakeholders around the drafting of the Rules under this Act (SARS, 2016a). The legislation is written in a user-friendly style, and the topics and themes are organised in a systematic and logical pattern. It aims to modernise and simplify customs administration. It is aligned with the country's constitution and was also benchmarked against other international trade instruments and treaties such as the Revised Kyoto Convention (RKC) (SARS, 2016a). The RKC's mandate is to harmonise, facilitate and secure international trade. The primary objective of the CCA is to regulate the process of importing goods and persons into or exporting goods from the country. Therefore, whenever goods cross the borders as either imports or exports, the customs legislation will prescribe compliance and control to traders and the customs authorities as well as obligations, rights and duties. The other purpose is to enable the effective collection of import and export tax on such goods and to facilitate the implementation of the tax levying Acts and other legislation applicable to such goods or persons. (Keyser & Katzke, 2017). International cross border transportation takes place by air, pipeline and sea. The focus of this study will be transportation of containerised goods by sea-going vessels into and out of the South African sea ports.

In section 38(1)(a) the CEA states that, "every importer of goods shall within seven days of the date on which goods are, in terms of section ten, deemed to have been imported or within such further time as the Commissioner may allow, make due entry of those goods, in the form prescribed, and declare to the truth of such entry". Section 38(1)(b) states that, "any importer may, at any place appointed under the provisions of this Act for the entry of goods, make such entry of goods which have been loaded on a ship or delivered to the carrier which conveys the goods by vehicle to the Republic for discharge at that place, notwithstanding the fact that such ship or vehicle has not yet arrived at that place".

The CCA in section 90(1)(a) states that, "for the purpose of clearing imported goods that are in terms of section 89 required to be cleared for home use[2] or customs procedure, a clearance declaration meeting the requirements of section 171(1)(a) to (d) must, subject to subsection (2) and (3) and section 908, be submitted to the customs authority, if the goods were imported on board a foreign going vessel, within three working days of the arrival of the goods at the customs seaport where the goods are to be off-loaded from the vessel".

[2] Goods released for home use become goods in free circulation. This means customs no longer exercises control over them

The rationale given by SARS for changing the point of customs clearance for not including the country's inland ports but rather limiting it only to the seaports is to ensure more control of the process. This includes close monitoring of the movements of goods across the country's borders, which will enable the authorities to assess any risk they might pose (SARS, 2016a). The manifest consists of a brief summary of goods on-board a ship only and does not have a detailed description of the cargo. There is no information on the tariff, value and origin of cargo on which the customs authority can rely to ascertain the level of risk attributable to the cargo. In contrast, the CCA requires that a customs clearance declaration is prepared and presented to customs officials by a registered person or a licenced or registered agent resident in the country. Such a person declares the truth contained in the clearance declaration and commits to the accuracy of the information related to the tariff, value and origin of the goods. This description is referred to as the Customs Trilogy and is governed by the following international apparatuses (SARS, 2016a);

- Valuation - GATT Article VII (WTO Agreement on Customs Valuation);
- Origin - WCO Preferential Rules of Origin; WTO Non-Preferential Rules of Origin; and
- Tariff Classification - the Harmonised System Convention of the World Customs Organisation.

The declaration is submitted electronically through the SARS's risk engine and is processed within seconds. The person who makes a submission can be held accountable for a false declaration (SARS, 2016b). At the face of it, this change might not seem problematic because the CCA permits for the electronic submission of documents to facilitate the process. The penalty regime associated with this change, in the event of non-compliance is more punitive compared with those of the CEA (Macqueen, 2016).

The reduction of the number of days in the CCA required to submit customs clearance for goods imported into the country was made as a result of recent technological advances in the global trade environment. The manner in which international trade is conducted currently differs vastly from the period in which the CEA was enacted. Information required to clear goods for customs is instantly available electronically to all users. To mitigate possible adverse effects of the reduced timeframe, the system also makes provision for customs clearance or the release of goods on submission of provisional or incomplete customs clearance information (SARS, 2016a).

The CCA also has consequences for the transportation of goods within the Southern African Customs Union (SACU). Under Customs and Excise Act 91 of 1964, goods imported within these signatory countries were classified as "movements"[3] and governed through a specific legal dispensation, policy and procedures, which is different to the processes applied to goods imported or exported from non-BLNS (Botswana, Lesotho, Namibia and Swaziland) countries. Trading partners have been compelled to be acquainted with two different sets of regulations. The (CCA) standardises the customs procedures by directing that all goods entering or leaving the country are imports and exports subject to a constant set of rules and processes (Macqueen, 2016). At its implementation, the CCA will tighten the documentation requirements for the importing containerised cargo (SARS, 2016a).

It is of significance to conduct this study to eliminate the gap in the literature and to address the impact of the CCA on the road congestion and flow of containerised cargo in the Port of Durban. Such a study has not been conducted for the Port of Durban, and it will offer better perspectives on the traditional management and business issues faced by the Port of Durban in traffic congestion.

### 1.2. Background to the study

Cedilnik (2013) states that customs clearance in the maritime industry exists as a result of trade between two or more international customs jurisdictions with the main focus of collecting customs duties for each trading country and facilitating trade between the countries involved.

Sustainable trade and the general flow of goods among the East and Southern Africa (ESA) region countries is of utmost importance in promoting economic integration and increased economic development among the countries (Msemburi & Liza, 2014). There exists a systematic relationship within the supply chains as a result of goods passing between customs territories. It is of crucial importance for industry players to be familiar with all the regulations they need to follow in order to assist them in reducing the time they allocate to expediting the required customs formalities by applying certain legally standardised institutes in customs legislation (Cedilnik, 2013).

The CCA introduces changes regarding the removal of the legislative rights of a carrier to convey and deliver containerised cargo to an inland terminal only under cover of a shipping

[3] Under the CEA less stringent customs regulations were applied in the cases of trade between the RSA and SACU countries

manifest. This has far-reaching effects on all the aspects of the logistics and freight forwarding industry. It potentially has an effect on South Africa's status as a transit corridor. In this regard, the country may lose its competitive position when compared with other African countries (Goodger & Marais, 2013).

The changes brought about by the CCA are the following:

- The time-frame to submit documents for import clearance declarations will be reduced from seven days to three days after arrival of containerised cargo in the country's sea ports. This is attributable to improvements in the electronic environment.
- In instances of delays in clearance, imported goods may only be cleared for home use and appropriate penalties will be imposed and the goods will be removed to state warehouse (Section 89, 90 and 92 of the CCA).
- Unlike under the CEA, the CCA requires a clearance declaration for goods destined for SACU countries instead of a manifest: effective risk control is only possible when SARS has all the necessary information regarding cargo being imported.
- The date of currency conversion will no longer be the shipped on board date. The currency date will be published every Wednesday and will be valid for the week.
- Suppliers of goods will also be able to issue a certificate of origin on the commercial invoice or other commercial document indicating the country of origin.

Seaports play an indispensable role in global freight distribution networks. Global freight distribution networks are characterised by many variables including the direction of trade, the receiving countries and exporting regions, legislative compliances, the capacity of linkages, manufacturing centres and the freight distribution patterns and transport operators (Rodrigue & Notteboom, 2013). Seaports can also be considered as important clusters of economic activities (Langen, 2004). The globalisation of trade has, to a great degree, increased the importance of ports and supporting sea-land interfaces. Robinson (2006) stated that seaports are part of wider interdependent transport networks which are embedded in supply chains. Over the past few years, the regional and hinterland impacts of ports in the global sea-borne trade have gained prominence as ports have developed. Rodrigue & Notteboom (2009) state that seaports are regionalised systems where there is a gradual process in which efficiency is derived from increasing levels of integration with inland freight distribution systems.

Port terminals can be described as large, functionally simple spaces that require extensive capital investments and a noticeable transformation of the landscape. Over the years they have also become more specialised or commodity-specific with clearly demarcated spaces for the various transportation modes for containers within terminals, areas reserved for storage, and areas for vessel, road truck and rail intermodal operations. The ports environment has become more complex due to new technologies and increased private sector involvement as well as the broader scope of services that have evolved (Rodrigue & Notteboom, 2009).

In South Africa, all the eight commercial ports are managed by the Transnet National Ports Authority (TNPA), which is the ports division of Transnet[4]. TNPA's responsibilities include infrastructure development, landlord functions, port planning and the oversight of port operations and other port support functions. The Port of Durban is one of Africa's largest and busiest multi-cargo ports. It is strategically located on major shipping routes. This general port serves as a hub for containerised and bulk cargo from the countries in the Middle East, Far East, Australia and the Indian Ocean islands. The port handles over 80 million tons of cargo per annum and serves as the international gateway into Southern Africa (Aurecon, 2015).

The volume of freight transported within the Durban area is driven by various external economic forces, which include the strength of the world economy; the Southern African Development Community (SADC) region economies of South African trading partners; as well as the domestic economy (Aurecon, 2015). The performance of these economies has a significant influence on the volume of imports and exports passing through the Port of Durban. This, in turn, significantly influences the volume of freight transported on the country's road and rail networks. In the past few years, the Port of Durban has been engaging in massive capital projects to expand its infrastructure to enable the port to handle the latest larger vessels in order to enhance greater trade between Southern Africa and the rest of the world (Aurecon, 2015).

The Port of Durban is one of the largest general and busiest ports in the Southern hemisphere. The port has established itself as a hub for containerised cargo, breakbulk and bulk cargo. It is strategically situated on busy trading routes from the Far East, Middle East, the Indian Ocean islands and Australia. Due to its position and existing infrastructure, it finds itself serving as the international gateway into the neighbouring countries in Southern Africa

[4] A logistics state-owned company in South Africa

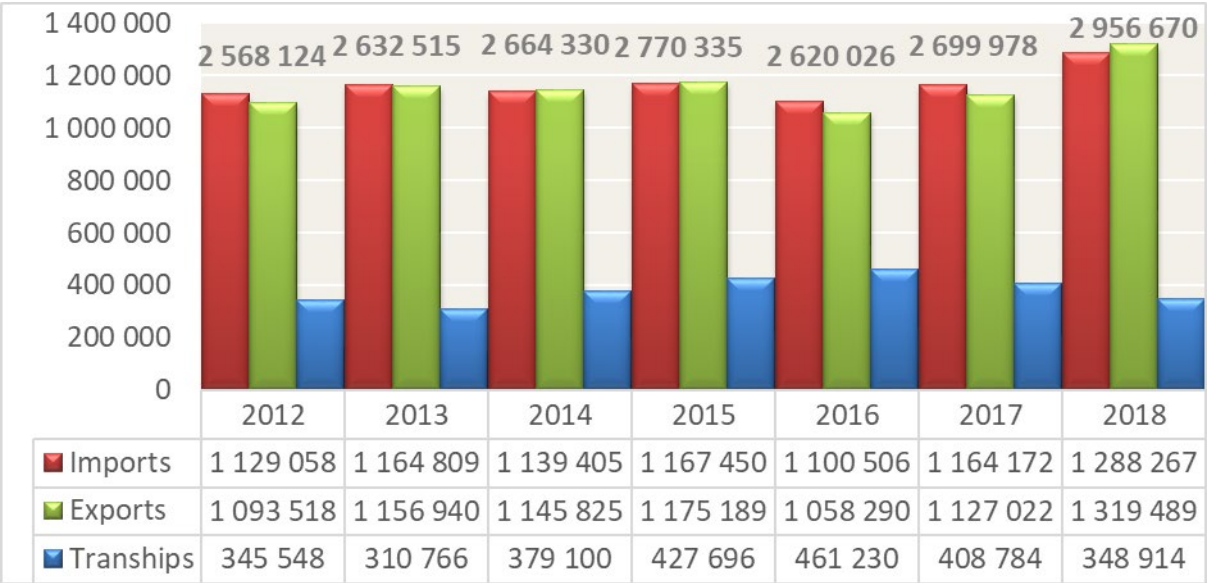
(Aurecon, 2015). About 90% of the country's international trade is by sea through the country's sea ports, which also act as the shipping feeder network responsible the east coasts and west coasts of Africa (Kneale, 2018). The Port of Durban is South Africa's dominant container port, and it is the main port serving the KwaZulu-Natal province and Gauteng, the country's economic hub, and the rest of the hinterland, as well as the neighbouring countries (Kneale, 2018).

On average, it handles just above 3000 vessel calls per year, which is the highest number compared with other ports in the country (TNPA, 2019b). The Port of Durban is linked to the country's hinterland by the Natcor[5] rail corridor. The North Coast line provides rail connection to Richards Bay and to the northern and eastern interior. However, most of the freight destined for Gauteng is transported by road. This is causing problems for the road network, particularly around the port area.

Transnet and the eThekwini Metropolitan Area (EMA) are jointly working on measures to address the road congestion in the short term and also planning for long term solutions to enable container freight to move efficiently through the road network. Short-term plans include the widening of the main road that runs through the port and linking it with the main arterial road out of the port precinct. There are also longer-term projects exploring near-port intermodal logistics nodes aimed at implementing infrastructural plans to meet road capacity requirements. (Aurecon, 2015).

Hutson (2019) states that in 2018, the Port of Durban handled a total cargo throughput of 83.161 million tons. The combined tonnage of all the ports in the country was 294.29 million tons. Over the previous five years, there had been a significant decline in the number of vessels calling to the ports of South Africa. This is not, however, an indication of a decrease in cargo volumes, but rather it is due to the use of much bigger ships, in particular large-tonnage container vessels. The total number of ship-calls to all the ports in the country in 2018 was 9202, a decrease from 9821 in 2017. In 2014 and 2015 the ports in South Africa had a combined figure of ship calls of over 12 000 ships. The Port of Durban saw the number of ships dropping to 3 061 in 2018 from 3 323 in 2017. In 2014, the Port of Durban handled 4000 vessels.

[5] Natal Corridor of the Transnet Freight Rail network




| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|
| Imports | 1 129 058 | 1 164 809 | 1 139 405 | 1 167 450 | 1 100 506 | 1 164 172 | 1 288 267 |
| Exports | 1 093 518 | 1 156 940 | 1 145 825 | 1 175 189 | 1 058 290 | 1 127 022 | 1 319 489 |
| Transhipments | 345 548 | 310 766 | 379 100 | 427 696 | 461 230 | 408 784 | 348 914 |

**Figure 1. 1 PORT OF DURBAN: NUMBER OF TEUs – IMPORTS, EXPORTS AND TRANSHIPMENTS**

Source: TNPA STATS (2019b)

Figure 1.1 shows that between 2012 to 2018, the Port of Durban handled an average of 2 701 711 TEUs per annum with volumes peaking at 2 956 670 TEUs in 2018. The exports grew to 1 319 489 TEUs. Imports increased to 1 288 267 TEUs while transhipments decreased to 348 914 TEU (TNPA, 2019b). Cargo forecasts in 2019 indicate that in 2023 containerised cargo in the Port of Durban is projected to grow to 3.5 million TEUs. They are further forecast to peak at 8.7 million TEUs in 2046 after the proposed Durban Dig-out Port (DDOP) is constructed and commissioned (TNPA, 2019a).

There is a great distance between the country's ports and its mining establishments and the hinterland. It is for this reason that the country is highly dependent on its transport network to contribute to competitiveness in international trade while at the same time facilitating domestic economic activity. The transportation system in South Africa is a multi-dimensional network which falls under various jurisdictions. These are the country's parastatals, public or government entities and independent operators which control the roads, the rail network, the aviation industry and the pipelines. The lack of efficiencies in freight transportation modes usually results in congestion points along the containerised cargo transportation value chain (Aurecon, 2015).

Increasing volumes of imports and exports over the last few years in the country have resulted in increased volumes of freight on the roads. The inefficient rail system in the country has resulted in most ship owners moving their cargo away from the rail network to the roads. Bulk cargo which traditionally was transported in a freight train is now periodically loaded and conveyed by road trucks to distant locations. A number of roads within the EMA particularly those leading into and from the Durban Container Terminal (DCT) experience major congestions on most days of the week. Containers are carried by large trucks which due to the heavy loads they carry, travel at low speeds and thereby contribute to the road congestion at key areas in the Port of Durban and the central business district CBD (Aurecon, 2015).

Road freight in the Durban municipal area is generated from various activities that are related to the port, local industries and the large distribution centres serving both the Durban and inland areas (Potgieter et al., 2015). According to Woxenius (2004), a consciously dry-port concept can effectively shift container volumes from the road to more efficient traffic modes such as rail that are less harmful to the environment. Cities with seaports would be relieved from some congestion as a result, making goods handling more efficient and also facilitating improved logistics and intermodal solutions for the container freight movers to the country's hinterland. Sessions (2013) states that road freight in the EMA precinct is generated from various activities that are related to the port. This includes local industries and the large distribution centres serving both Durban and inland areas. This report was drafted for the eThekwini Municipality to identify all the issues that need to be addressed by the municipality in its roads network from the perspective of the Durban port road and rail logistics. All operational activities in the port were studied and analysed in terms of their contribution to the congestion on the roads in the port precinct. A number of issues were identified which need to be addressed in order to implement an efficient freight and logistics strategy.

Another study was conducted on behalf of Transnet National Ports Authority to assess the state of traffic congestion in the Durban port (Aurecon, 2015). All the roads leading out of the port were studied in terms of their load and occupancy. Minor access roads to individual depots were studied and other leasehold users in the port were also examined. The scope of the study included the designs of short term, medium-term and long-term improvements to relieve the current and future congestion on all the major roads in the port and some of the

key external arterial roads operated by the eThekwini Municipality and the provincial government.

Mulla & Bester (2016) conducted a study to find answers to two main questions regarding pervasive traffic congestion in the Port of Durban. The first one being, “what is the volume of freight traffic generated by the Port of Durban and its overall freight distribution?” The second one was, "what impact does the Port of Durban have on the eThekwini Municipality's road network?” This was achieved by quantifying the road-based volumes, especially of heavy vehicles, based on Transnet's Freight Demand Forecast for the Port of Durban (Mulla & Bester, 2016)

Scholtz (2017) argues that the Durban Container Terminal will reach its maximum operating capacity of 3 600 000 TEU moves per annum between 2020 and 2024 unless Transnet makes infrastructure improvements in both landside and its rail network. One of the recommended infrastructural improvements is the utilisation of a dry-port located not very far from the port.

Another important aspect of containerised cargo transportation cost is one of the methods that can be adopted to cut these costs is by connecting a seaport with another complementary transportation system to a dry-port. In the context of South Africa, the majority of exports originate in the Gauteng province. The largest dry-port in that province is the City Deep.

The road and rail infrastructures in South Africa are well developed when compared with the other neighbouring countries in the South African Development Community (SADC). What is conspicuously lacking are the intermodal facilities for conveying goods to distant locations in the country and beyond. To its advantage, the Port of Durban has well developed road connections with the major arterial roads that run through the KZN province to other provinces, like Gauteng. The only problem is that the access roads to these arterial roads are becoming increasingly congested. This is especially true during peak business hours in the early mornings and afternoons, when port access gets constrained by the volume of heavy goods vehicles (HGVs) (Kgare et al., 2011)

South Africa plays a pivotal role in the regional trade among the countries in Southern Africa. Because the countries which are South African Customs Union (SACU) partners are mostly landlocked, they are vulnerable when their ability to import is disrupted. A significant percentage of sub-Saharan Africa's trade passes through the Port of Durban as a point of transit. Also, these countries’ economic growth rates are an indication of the extent to which they depend on Durban in their future trade (Aurecon, 2015).

### 1.3. Aim of the study

The aim of this study is to explore the implications of implementing the Customs Control Act 31 of 2014 on the road congestion from the Port of Durban to various destinations.

### 1.4. Rationale for the study

Customs clearance of containerised cargo is processed under the current CEA. Section 38(1)(a) of this Act states that, "Every importer of goods shall within seven days of the date on which goods are, in terms of section 10 deemed to have been imported, except in respect of goods in a container depot as provided for in section 43(1)(a) or within such time as the Commissioner may prescribe by rule in respect of any means of carriage or any person having control thereof after landing, make due entry of those goods as contemplated in section 39". This Act allows containerised cargo to be transported directly to the country's inland ports upon arrival at the sea ports with the manifest being the only supporting document.

In terms of section 90(1) of the CCA, "a clearance declaration meeting the requirements of section 171(a) to (d) must, subject to subsection (2) and (3) and section 908, be submitted to the customs authority within three working days of arrival". This legislation requires all sea cargo imported to and exported from ports in South Africa to be cleared at the ports of entry. Customs declaration under this Act requires information on the nature, value, origin and duty payable on the goods. The CCA also introduces the 24 hour advance rule which is aligned to the SAFE Framework of Standards and shows South Africa's commitment to secure the supply chain. This policy allows potential threats to be identified before a container a container is loaded at the foreign seaport, which enables customs to prevent the cargo, if posing a threat, from entering the port in the Republic of South Africa.

The implication of this requirement is that the existing inland ports like City Deep in Johannesburg will no longer be designated places of entry or exit for customs purposes. They will in effect be downgraded to ordinary container depot status, at which the customs function will be limited only to inspection.

It is inevitable that the change in the legal requirements for clearing containerised cargo in the Port of Durban will result in substantial changes for all the stakeholders involved. This can include the additional formalities demanded by the new law which will mean more administrative burdens associated with border crossings, more paperwork, electronic systems

issues, additional charges and traffic delays. All of these will have a ripple effect on the congestion experienced in and around the port.

## 1.5. Research questions

What is the impact of the implementation of the Customs Control Act 31 of 2014 in the clearance of containerised cargo in the Port of Durban?

How can the movement of containerised cargo be improved given the current challenges of congestion on the roads and the challenges that may be further introduced by the new Customs Control Act?

What are the roles played by inland container terminals in easing traffic congestion in the Port of Durban?

## 1.6. Research objectives

To examine the impact of the implementation of the Custom Control Act 31 of 2014 in the clearance of containerised cargo in the Port of Durban.

To investigate the container freight distribution patterns from the Port of Durban to local, regional and hinterland destinations.

To understand the role played by inland container terminals in easing traffic congestion in the Port of Durban.

## 1.7. Research method

### 1.7.1. Research design

The research is going to use document analysis. This method is a form of qualitative research in which the researcher interprets documents in an attempt to give a voice and meaning to a topic under study (Bowen, 2009). The process of analysing documents entails coding content according to themes in a similar way to which focus group or interview results are analysed (Bowen, 2009).

Provisions of the CEA pertaining to the customs clearance of containerised cargo will be studied and contrasted to those as codified in the CCA. This study utilises a descriptive design. Qualitative researchers always focus on describing the actions (Babbie & Mouton, 2001). Detailed and rich research information will be retrieved from previous research studies conducted on the subject.

### 1.7.2. Data Collection

Data will be collected through using desktop. Each seaport context will be examined and reviewed in the selected and relevant port literature. The methodology to be used is a structured procedure.

**Chapter outline**Chapter1: This chapter will talk through the background to the study, the problem statement and the aims and objectives of the research. It will also give the value of the study as well as the design and methodology that will be employed in the study.

Chapter 2: Will be the literature review whereby published research, unpublished reports and documents will be studied. Furthermore, it will give an overview of the theoretical frameworks that underpin the study. In this case law and economic theories will be discussed in detail and their value in this piece of work will be highlighted.

Chapter 3: Will discuss details on research methodology and explain the reasons the researcher adopted the methodology used.

Chapter 4: This chapter will give the analysis of the results and discussion on the research in detail

Chapter 5: Conclusions and recommendations will be provided in this final chapter.

# CHAPTER 2: LITERATURE REVIEW

## 2.1 Introduction

This chapter will discuss the theories on the international standards of trade and how customs operate in South Africa in relation to trade as well as trade facilitation. South African customs legislation and the World Trade Organization will be discussed and how trade affects the countries. Barriers to trade will also be examined.

The literature on economic theory based on international standards and their impact is limited. Hence this dissertation put the focus on reviewing and exploring the empirical work that has been carried out to examine the effects of the current international standards and laws in practice on trade (Swann, 2010).

## 2.2 South Africa and customs on trade legal provisions

Globally, customs administrations are responsible for enforcing control over imported and exported goods, even on behalf of other national government departments. National customs departments usually base their customs laws on international instruments and conventions. These instruments are principally established by the World Trade Organisation (WTO) and include instruments such as GATT, the WTO Agreement on Trade Facilitation (ATF), Agreement on Customs Valuation (WTO Agreements). The World Customs Organisation (WCO) applies instruments such as WCO Kyoto Convention, the Revised Kyoto Convention (RKC), WCO SAFE Framework of Standards, and Harmonised System (HS). This latter convention is known as the Harmonisation and Simplification of Customs Procedures. The World Customs Organisation (WCO) is the only intergovernmental organisation competent on customs issues (Bagwell, 2009).

Customs clearance also serves other purposes, for instance, to ensure that prohibited goods do not enter the country, or that restricted goods may only be imported subject to certain permits, certificates or licences. Importers and their appointed customs brokers must also be registered, and their premises must be licensed. The customs clearance declaration is the most important form of customs control since it is a binding declaration which is submitted by a declaring party to the customs administration. The term "goods declaration" is defined in

chapter 2 of the General Annex to the Revised Kyoto Convention as "a statement made in the manner prescribed by the customs, by which the parties concerned to indicate the customs procedure to be applied to the goods and furnishes the particulars which the customs require for its application." The goods must also be clearly described for taxation purposes (SARS, 2013).

### 2.3 Role of customs in international trade and South Africa

It is of critical importance for customs departments to understand and identify the main drivers of change in the international trading environment so that they can be adequately prepared to respond to them accordingly. The traditional role of customs has always been the collection of duties and excise for the respective countries at the national borders, whether inland, airports or sea ports. As a result of the rapid globalisation of trade, customs authorities the world over are finding themselves in a previously unchartered operating terrain. The last two decades has seen rapid and dynamic changes in how trade is conducted internationally. The main catalyst is the continuous developments in communication and computer technology. Notwithstanding that, the basic function of customs remains the controlling of the movement of cargo and the matching of documents across the borders. This ensures that legitimate trade and society are protected against illegal importation of illicit cargo that could pose risks to the people's health and even lives (Peterson, 2017).

Experts have increasingly understood the economic impact that customs have in a country, as they can either be an enabler or an impediment to international trade. The borders of all international trading countries handle large volumes of diverse cargo, and each stage of inspection by customs or security procedures results in a complete or partial stoppage in the movement of goods with a resulting impact on their quality and price (Kellner, 2016).

### 2.4 Legislative framework for customs clearance

The CEA was enacted more than thirty years before South Africa's new democratic constitutional state came into being in 1994. It was amended and will be replaced by the CCA (once it is fully implemented) in order to be more modernised and be constitutionally compliant. The CEA has been operational for over half-century and has played a pivotal role in laying the legal framework for the country's national trade system, process and policy in

line with international systems in the field of imports and exports and has been replaced by the following three pieces of legislation (SARS, 2016a):

- Customs Control Act, 31 of 2014, that regulates a customs control system for all goods imported into, or exported, from the country and that prescribes the operational aspects of the system;
- Customs Duty Act 30 of 2014, that regulates the imposition, assessment and collection of customs duties; and
- Excise Duty Act, 1964 (that is, the Customs and Excise Act, 1964, as amended by the Customs and Excise Amendment Act, 32 of 2014) that regulates the imposition, assessment and collection of excise duties and related levies. This Act will be re-written in the second phase of the project.

It was, therefore, necessary for customs to change or re-write the CEA to benchmark with other countries internationally and comply with new laws as well as to modernise the processes to keep up with the latest technology and systems to carry out trade and facilitation adequately and efficiently (SARS, 2016a).

Section 38(1)(a) of the CEA states that, "every importer of goods shall within seven days of the date on which goods are, in terms of section 10 be deemed to have been imported, except in respect of goods in a container depot as provided for in section 43(1)(a) or within such time as the Commissioner may prescribe by rule in respect of any means of carriage or any person having control thereof after landing, make due entry of those goods as contemplated in section 39."

To effect the customs clearance and to release shipments, the importer and exporter are required, in compliance with the requirements of section 38 (customs clearance and time of entry) and section 39 (supporting documents), to submit valid customs clearance declaration (SAD 500). The following documents are required: -

- Commercial documents;
- Exchange control declarations;
- Import/export permits;
- Inspection certificates;
- Health certificates; and
- Police clearance certificates.

On the other hand, in terms of section 90(1) of the CCA, "a clearance declaration meeting the requirements of section 171(a) to (d) must, subject to subsection (2) and (3) and section 908, be submitted to the customs authority within three working days of arrival at the port of entry, e.g. Durban as opposed to a designated inland port. Failure to comply with these provisions may cause loss and/or penalties. Failure to comply with these provisions will also result in administrative penalties".

It is specified in Section 89 the requirement of the clearance of imported goods that (SARS, 2016a):

- All imported goods must be cleared to customs on a customs clearance declaration/bill of entry/goods declaration. Customs is pre-alerted that containers will be imported when they receive a manifest/cargo declaration from the carrier. Under the CEA, importers have seven days to make a valid entry to the customs authority (section 38). The CCA, however, reduces this period to three working days.

  If the containers are not declared within the prescribed time-frame, they will be removed to the state warehouse where they will remain until they are appropriately declared or sold. A "goods declaration" is a written document completed following guidelines made by customs whereby the declarant (importer) indicates the customs procedure to be applied to the containers and furnishes the particulars which customs require for its application for duty assessment and for the purposes of the Act. Customs declarations must be valid (Mavropoulos, 2016). Section 40 of the CEA states that due and valid entry must be made. The same aspect is covered in the CCA in section 172. Section 167 of this Act deals with the content of the customs clearance declarations. Trade and transport documents pertaining to the international movement of the containers, such as the invoice, bill of lading, packing list, etc are the source documents for the data fields of container declarations. These documents are submitted together with the declaration to customs and are therefore referred to as supporting documents (section 39 of the CEA and section 176 of the CCA).

The CEA allows importers of containers to move containers in bond[6] from a seaport for instance, in the Port of Durban to an inland container terminal, for example, City Deep, in

[6] Cargo removed to a container depot or container terminal to which it is consigned without furnishing the security provided for in section 18 (1)(d) of the CEA and the manifest of the goods packed in such container shall be deemed to be due entry for removal in bond of that container.

Johannesburg without submitting a customs declaration to customs. The containers are transported through the country's hinterland on the basis of a ship's manifest. There are no security requirements, and liability for removal rests with the container operator. On arrival of the containers at the inland container terminal, the importer performs all the relevant customs procedures and pays the duties (Dlamini, 2013).

The CCA, on the other hand, requires that a customs clearance for containerised cargo to be submitted at the first port of entry into the country, for example, the Port of Durban. This declaration includes the customs trilogy, such as the true value of the cargo and duties and taxes that are payable, the origin of the goods and a clear description of the products as per the Harmonised Commodity and System (HS Code). The HS Code will indicate whether the goods pose a fiscal or economic risk or a safety and security risk to society. The inclusion of the origin, HS Code and true value on the declaration facilitates the electronic data processing, which contributes to effective risk management and customs control. The declaration is submitted in electronic format and runs through SARS's risk engine within a few seconds (Goodger & Marais, 2013).

South African customs' position is that the manifest on its own is not adequate as it does not contain sufficient information on which basis the goods are risk assessed. Hence, the above requirement of a full declaration at the first point of entry. The CCA also places an obligation on importers to make self-determination on tariff classification (section 99 of CCA), customs valuation (section 116 of CCA) and origin (section 152 of Customs Duty Act 30 of 2014).

### 2.5 International context

The Port of Durban is a general cargo seaport which is integrated within the global supply chains, and it is South Africa's most strategic linkage in its global trade. For this reason, the efficiency of the port and its logistics system as a whole is of utmost importance. Efficient and cost-effective transportation systems that link global supply chains are the catalysts that ensure sustained economic development and stability. While various regions and trade coalitions compete for a bigger share of international trade, it is the quality of the policy environment, infrastructure provision, regulation and development of services and the facilitation of trade through more user-friendly procedures that set countries apart when striving for global competitiveness (Maharaj, 2013).

Numerous systems have been developed and implemented globally by the World Trade Organization (WTO) and WCO to promote the regularisation of several facets of facilitation, including enforcement methods and customs penalty regime frameworks. WTO in 2013 concluded the Trade Facilitation Agreement to set out the clear vision of improving the movement, release and clearance of goods, including goods in transit. Further, the agreement provides support to less developed countries and promotes cooperation between WTO members on matters of trade facilitation and customs compliance (Peterson, 2017). The agreement mandated members of WTO to publish information on penalty provisions for breaches of import, export or transit formalities and to publish information on appeal procedures to assist traders to know if laws were breached and to understand the remedies available to members.

The International Convention on the Simplification and Harmonisation of Customs Procedures ("Kyoto Convention") was formulated in 1999 and implemented in February 2006 to provide for predictability and efficiency in the international trade field. The Southern African Customs Union (SACU) was established in 1910 with a shared external tariff regime and without customs duties to apply to intra-union trade (Grynberg & Motswapong, 2012). Customs and excise legislation is currently controlled in the CEA, which determines the rules for the levying of customs and excise duties, and specifies other taxes such as fuel levies, Road Accident Fund levies, environmental levies and air passenger tax. In order to facilitate the administration and collection of these taxes, this legislation prescribes an extensive system of customs control concentrating on the import, export, manufacture and use of goods. For the rationale of expediency and logic, these regulation mechanisms also provide a secondary purpose, namely, to put into effect the parliamentary boundaries on the import and export of certain precise regulated goods, and to inhibit the smuggling of bogus and other illicit and dangerous goods into and out of the country (SARS, 2013).

The CEA may justifiably be said to be outdated and not passable for the appropriate monitoring and control of the import and export of certain goods in South Africa. This is due to the fact that technology is changing and a lot has changed in the past 50 years. The Parliament and South African Revenue Service (SARS) have therefore realised that it is appropriate to refurbish the current administration or system (Mavropoulos, 2016). The primary aim of the re-creation was to create a workable balance between trade facilitation; regional integration and customs control (Keyser & Katzke, 2017). The intention of the CCA

is to bring South African customs law in line with international standards, including the revised Kyoto Convention and the World Customs Organization's SAFE Framework, as well as to carry the procedures and practices mandatory in line with technological advances. SARS states that the twenty-four-hour advance loading notice rule for containerised cargo is also aligned to the SAFE Framework of Standards and is a clear indicator of South Africa's commitment to secure the supply chain. The policy additionally allows potential threats to be identified before a container is loaded at the foreign seaport. This enables South African customs to prevent the cargo from entering the port in the RSA if it poses any kind of threat to the country. The new acts are further directed at streamlining the customs administration process as well as improving SARS' end-to-end visibility of the transport of goods for fiscal purposes. All importers and exporters will have to re-register in terms of the new legislation (Keyser & Katzke, 2017).

Chapter 5 of the CEA provides for the "clearance and origin of goods, liability for and payment of duties". Section 40 stipulates the validity of entries as follows (SARS, 2016a):

(1) No entry shall be valid unless-

(a) For imported or exported goods, the description and particulars of the goods and the marks and particulars of the packages declared in that entry correspond with the description and particulars of the goods and the marks and particulars of the packages as reported in terms of section seven or twelve or in any certificate, permit or other documents, by which the importation or exportation of that cargo is authorised;

(b) the goods have been properly described in the entry by the denomination and with the characters, tariff heading and item numbers and circumstances according to which they are charged with duty or are admitted under any provision of this legislation or are permitted to be imported or exported;

(c) the true value of the cargo on which duty is leviable or which is required to be declared under the provisions of this Act and the true territory of origin, territory of export and means of carriage have been declared;

(d) in the case of goods purchased by or sold, consigned or disposed of to any person in the Republic, a correct and sufficient invoice thereof, as prescribed, has been produced to the controller;

(e) the correct duty due has been paid, provided that no bill of entry shall be invalid by reason of any deferment referred to in the proviso to section 39(1)(b) (SARS, 2016a).

## 2.6 Places of entry

In chapter 2, the CCA provides for the customs control, places of entry and exit and customs non-control areas. The reasoning behind modifying the existing Act was informed by the fact that SARS can only effectively control the movement of goods across South African boundaries and assess the risk it poses if it has the necessary information. A manifest is a brief summary of cargo on board a vessel, and it only provides a general description of the goods (Keyser & Katzke, 2017). The manifest does not contain the tariff, value and origin information which is required to determine risk. The information on the transport document is solely based on information supplied to the carrier by a person in a foreign territory. In contrast, a clearance declaration is submitted by a registered person or licensee or a registered agent located in the Republic of South Africa and contains the tariff, value and origin information which is necessary to determine risk. (Keyser & Katzke, 2017).

This shows that innovation was required in order to keep up with the advancements of technology and change in the countries. Further, the Act instructs with the principles guiding clearance and release of goods and customs procedures in chapter four as supported by figure 2.1 of the release and phases of goods and customs procedures. This process includes the principles of governing transport, sealing and loading of goods specified in chapter five of the CCA as well as warehousing procedures. It starts with the registration, licencing and accredidation system which will permit the electronic submission of certain registration and licencing applications. Reporting conveyances and goods implements advanced containerised cargo loading notices. This notification will require the electronic submission of information to SARS at least twenty-four hours before the first container in a consignment is loaded on board a vessel at the port of load. For declaration processing in all commercial trade across South Africa's borders, supporting documents will be in electronic format. The processing of cargo movement by land, sea and air will now be much quicker and more accurate.

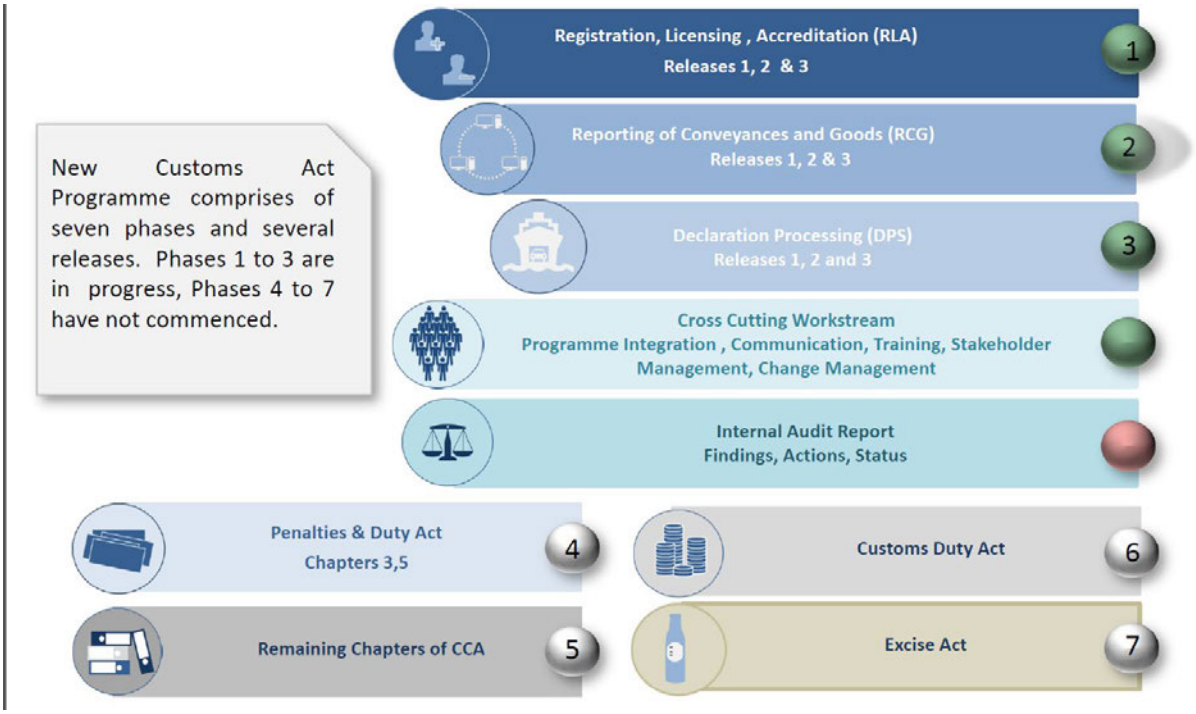



**Figure 2. 1 Releases and phases in the Customs Control Act 31 of 2014**

Source: SAAFF (2016)

The CEA focused on the carrier manifest (shipping lines/carriers) document while the CCA's focus is on the customs declaration (traders). Carrier agreements, customarily acknowledged by the trade as contracts of carriage, accommodated the collection and delivery of containerised cargo to recognised and licensed inland container terminals. In this process, the manifest served as clearances for such shipments to either transit or be delivered to or from such Inland ports/release granted prior to onward inland transit. Various studies have been conducted with the focus of the assessment on the impact on business efficiencies, including ports efficiencies, congestion on the roads and rail as well as the impact on the process of business transactions by importers in the context of customs compliance (Goodger & Marais, 2013).

Customs is a strategic priority for the revenue agency and an expedition to streamline the CEA culminated in the passing of two new customs Acts in 2014 to replace it. The revisions in the customs Acts introduce a new era in customs and excise control in South Africa. This Act aims at remodelling customs control in South Africa and aligning it with the various recommendations of the World Customs Organization. Freight clearing forwarding companies involved in importing, exporting and the manufacturing of excisable goods (such

as cosmetics, alcoholic beverages, cigarettes, motor vehicles and electronics) will all be affected. The legislation has prolonged the exploratory proficiency of SARS to monitor compliance. It will be custom's duty to track the goods throughout the entire supply chain, and the responsibility will be on the firm to inform customs ahead of each stage in the cycle illustrated in Figure 2.1. Tax consultants will be able to conduct reflective audits from three years back. In instances where SARS suspects fraud, there is no time limit on how far back customs can audit the corporation (Keyser & Katzke, 2017).

The two new customs Acts were promulgated in July 2014, that is, the CCA and Customs Duty Act 30 of 2014 (CDA). Each of the Acts contains a set of rules which set out how they will be implemented. SARS held several public hearings and workshops in order to address concerns raised by stakeholders and to facilitate the assessment and possible inclusion of comments and suggestions from stakeholders prior to implementing the Acts. (Keyser & Katzke, 2017).

One of the major changes hoped to result from the new system is the shortening of the time period permissible to submit import clearance documents from seven to three days. The Acts focus on electronic submission of documents and files in order to allow the process to be more efficient. The changes to the penalty scheme have caused concern in the import industry (Keyser & Katzke, 2017). In terms of the CCA, the information supplied by customs' brokers on behalf of importers or exporters is regarded as being information submitted by the importer/exporter themselves, and every party will be held accountable for any inaccurate information or reporting. The penalty breaches include the possibility of criminal liability being attached to inaccurate reporting after a certain number of incidents have occurred (SARS, 2016a). Potential criminal liability adds an entirely different dimension to the new rapid reporting requirements (Keyser & Katzke, 2017) .

The Acts change the timing of certain clearance procedures, and subject them to stern time constraints. There are separate import and export activities for various customs procedures with designated legislation surrounding each activity such as home use processing, inward processing, outward processing, temporary admission procedures, and warehousing procedures (Goodger & Marais, 2013). In Figure 2.2 below the area of intersection of both curves illustrates the customs clearance procedures in line with the CCA. Most activities that take place prior to the cargo reaching the port of export. At the actual point of entry fewer

formalities are undertaken. This ensures that minimal delays occur at the exit cargo terminal. Post release procedures and controls are executed after the cargo has exited the destination terminal.

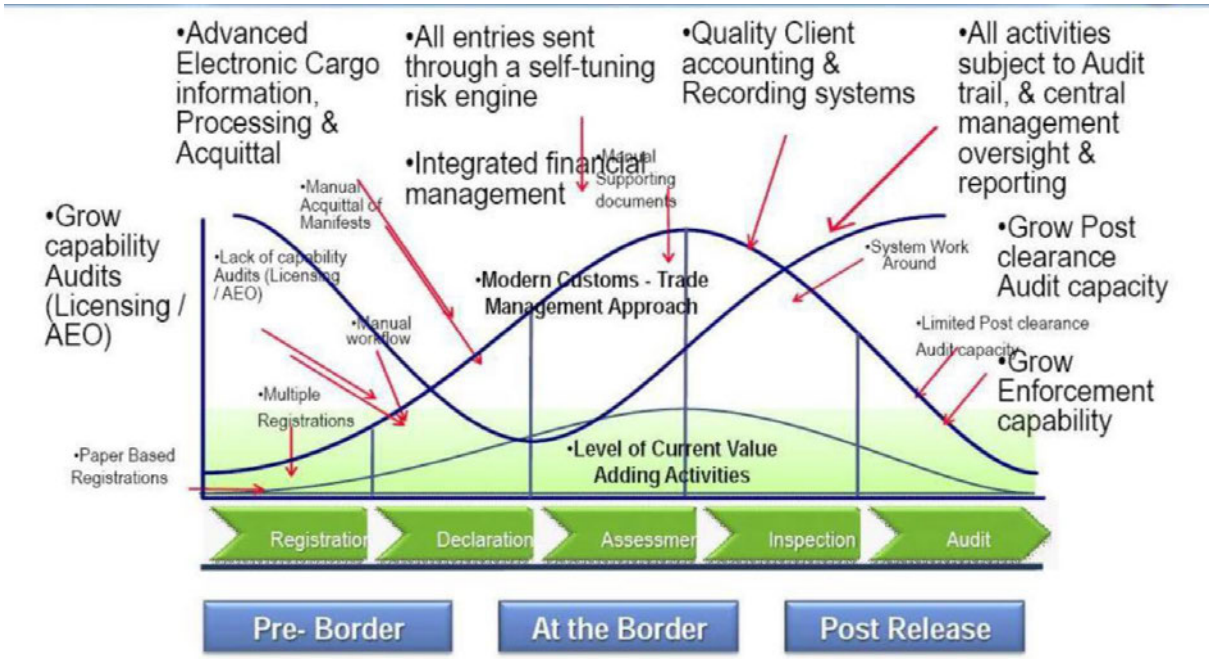



**Figure 2. 2 Customs Modernisation Approach**

Source: SARS (2016a)

Section 90(1)(a) of the CCA provides that, " a clearance declaration must be submitted to the customs authority if the goods were imported on board a sea-going vessel, within three working days of the arrival of the goods at the customs seaport where the goods are to be off-loaded from the vessel. Section 90(4) requires a clearance declaration in respect of containerised goods that are consigned for delivery to licensed container terminal or depot situated inland to be submitted at least three calendar days before the arrival of the goods at the customs seaport". The submission of a clearance declaration within the prescribed time frames does not include release, but it must have been accepted by the customs authority in terms of section 171 (SARS, 2016a).

Figure 2.2 is aligned with Figure 2.1 in terms of the processing of documentation by parties from pre-border, which includes advanced electronic cargo information, processing and acquittal. This is where registration and declaration is done. The border includes all entries sent through a self-tuning risk engine where assessments and inspections are done. This

process is concluded once the post-release stage is reached where all activities are subject to audit, central management oversight as well as reporting. This last phase also comprises the growth of post-clearance audit capacity and the growth of enforcement capability. (Mavropoulos, 2016). With regards to the customs value chain for containerised cargo movement only, the pre-border electronic processing of traders' information and revenue collection can be managed by the customs authority. This is the primary source of revenue collection in the customs value chain. Furthermore, SARS will remain the custodian of managing traders' information and the associated risk engine and systems linked to all traders (SARS, 2016a). According to Rule 7.6 (1) with section 176 (1) (c) of the CCA, the clearance instruction must reflect all the following aspects: (SARS, 2016a).

a) Name and Customs Code of principal issuing the instruction;
b) Full description of goods;
c) Customs procedure or home use;
d) Country of origin of goods;
e) Any origin determination;
f) The tariff heading;
g) Any tariff determination applicable;
h) Customs valuation method;
i) Any advance ruling applicable to the goods;
j) Destination of goods;
k) Trade agreement under which goods are to be cleared;
l) Tax payment method; and
m) Financial account number.

Trade has raised concerns regarding the CCA in that it may be the cause of South Africa's inland dry ports being relegated to regular container depots while at the same time burdening the seaports with added customs clearing responsibilities. Under the CEA the country's inland ports have the status of seaports, empowered with full customs clearing and forwarding[7] capability.

[7] An entity whose function is to combine the various sections of transport value chain into whole. This can include the links of the different modes , like, air, road, railway, and the related services like cartage, dock charges, insurance and freight.

According to Nevin (2016a), inland ports were conceived more than 40 years ago to ease the pressure off the seaports by simplifying the seamless movement of seaborne cargo to and from inland destinations in a single operation. The concept of an inland port, for example, City Deep in Johannesburg is that the sea vessel technically docks there, with the same equipment and facilities as a seaport, permitting importers and exporters to consign containerised cargo to and from foreign ports. In the event that facility is removed, the importer or exporter is obliged to arrange rail or road transport to or from the seaport separately at an added cost.

Nevin, 2016a argues that seaport space has limited capacity. It is a throughput area and not a storage facility. Added congestion will negatively impact on a very congested logistic chain, thus causing further delays in traffic movement. To a great degree, the CEA has alleviated this situation by allowing containerised cargo to be consigned directly to or from the inland ports to any international port and thus simplifying cargo delivery in a single-document operation.

Whilst the objectives and basic rationale behind the new customs system are creditable, the potential impacts of some of their more exhaustive requirements may result in additional being placed on South Africa's import and export industries than the developing nation's economy can handle (Macqueen, 2016). Despite the fact that many stakeholders are understandably apprehensive about the potential challenges the new Acts may cause, some businesses are hopeful that SARS' assurance regarding their ability to facilitate the change-over appropriately will be justified, especially in light of the numerous public engagements SARS has had with stakeholders in respect of these Acts (Macqueen, 2016).

Table 2.1 below depicts the sections on customs clearance in both the CEA and CCA. The third column shows the changes in the procuderes as contained in the CCA. For the purpose of customs clearance, sections 90 and 92 of the CCA are of critical importance.

**Table 2. 1 CEA vs CCA (Changes)**

| Customs & Excise Act of 1964 | Customs Control Act sections | What has changed (New Act) |
|---|---|---|
| 38 | 90(1)(a) | Goods must be entered at the first port of entry – the first port of call |
| 39 | 268 | Goods which are released for temporary admission must state the period the goods will remain in the RSA and when they will be exported. |
| 39 | 465(1)(b) | Goods must be exported if no period is determined within two years from the date of clearance. |
| 43 | 92(1) | Goods must be cleared within three working days of arrival, or else they may only be cleared for home use, the penalty imposed and goods are treated as/or removed to state warehouse. (Duty paid status) |
| 40 (3)(a)(ii)(b) | 107(2) | The period in which to apply for substitutions has been reduced from 6 months to 90 calendar days |
| | 379-380 | Goods cleared for temporary export must now return to the RSA within one year – previously it was not a requirement |
| 76 | 465(1)(a)(b) | Time limit on clearance for home use of outward processed compensating goods - new, if no time frame is given – 2 years from the time of clearance |
| 59A | 614(1)(b) | Registration certificates for rebate users are now valid for a period of three years only – currently, there is not a validity period |
| 59A | 615 | Applications for registration as importer/exporter must be submitted 30 working days prior to the expiry of the three-year period. |
| 60 | 647(1)(b) | Licenses are now valid for three (3) years – increased from 1 year |
| | 874-885 | Types of administrative penalties |
| 47 | Customs Duty Act, Section 86(1) | The prescribed period in which Customs may perform a reassessment of duties has been extended from 2 to 3 years. Ditto – for refunds and drawbacks |
| Not provided for | 208, 230, 304, 322, 415 & | No person may redirect goods from the starting point or to the delivery point of a transit/warehouse operation. Approval from Customs |

| | | |
|---|---|---|
| | 422 | required. |
| Not provided for | 94(1)(a)(i) | Goods to be cleared for export by:<br>**Sea** – no later than 2 hours before delivery to depot or terminal.<br>**Air** - no later than 1 hour before the goods are delivered to a depot or terminal<br>**Truck** – no later than the time the truck reaches the land border post. Goods may only be cleared once loaded onboard the truck and the doors sealed. |

Source: Subban (2009)

Aspects covered by the CCA that cover the procedural facets of customs compliance are the following (Subban, 2009):

- control over the places of entry and exit;
- advance reporting of imports and exports;
- registration and licensing;
- clearance and release procedures;
- accreditation;
- the movement of goods in and out of terminals;
- the processing of travellers and crew;
- enforcement and dispute resolution; and
- collection of debts;
- advance tax rulings; and
- The handling of goods imported via the postal service etc.

The CCA will offer the following benefits (SARS, 2016a):

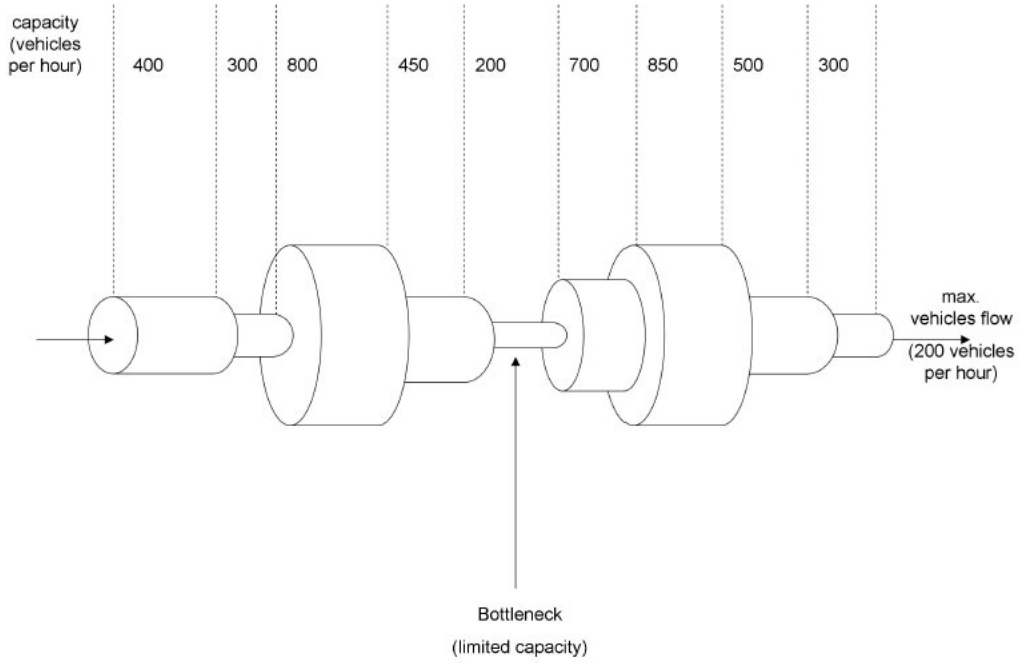
- Simplified customs administration and faster processes to minimise disruptive effects;
- Terminology that is clear, and user-friendly language which follows global terminology (this will assist multinational companies in speaking one global trade language across their business);
- The proposed pieces of legislation are designed in a logical and systematic way, with topic-specific chapters which can be understood;
- Flexible warehousing and manufacturing options, which will ensure South Africa's role as a distribution hub and will stimulate international trade;

- The legislations also support the objective of the National Development Plan (NDP) to promote exports and business competitiveness, stimulate domestic manufacturing and support small, micro and medium-sized enterprises (SMMEs);
- Time-saving;
- Improved communication;
- Electronic applications and registrations for extensions of expiry dates; and
- Paperless reporting benefits to compliant cargo reporters- shipping lines and airlines.

### 2.7 Customs organisations as an active factor of supply chains

Nordas et al. (2006) state that at any given time, numerous and divergent role players are actively involved in the operation of maritime supply chains to a greater or lesser extent in various capacities. One of the main role players in the international supply chains is customs, whose main objective is to control all goods imported into or exported out of a country. By means of these controls, customs departments and other relevant government institutions are aiming to address the challenges posed by changes in the global field of supply chain.

When cargo crosses international borders, the most time-consuming processes ultimately determine the speed of movement of the goods. This part of the process negatively affects the performance of all the participants and thus becomes a bottleneck at the border crossing point (Nordas et al., 2006). As in Figure 2.3 below, in the border crossing system, 200 heavy goods vehicles are processed in one hour by the customs authority. By contrast, other processes within the border system operate at higher capacities others up to 850 vehicles in one hour. This means that, despite such high processing speeds of the other role players in this value chain, no more than 200 vehicles can be completed in any one hour. From one side to the other side of the border, the line of vehicles moves at the speed of the slowest participant - in this case, it is customs.




Adapted from Supply Chain Management: An Introduction to Logistics, 2nd ed. (p. 120) by D. Waters, 2009, New York, Palgrave Macmillan.

**Fig**

**Figure 2. 3 Bottleneck at the Border Crossing Point**

Source: Waters (2009)

According to Waters (2009) removing the obstacles like unnecessary documentation, fees and taxes can be beneficial in improving the effectiveness and speeds of processing at border crossings. The main focus of the customs departments should be ensuring effective control at border posts without inhibiting legitimate trade. This can only be achieved by improving the methods of the movement of goods and the fluidity of the customs systems (Waters, 2009). Customs administration can achieve this control by forming partnerships with economic institutions, where mutual interests are represented to the greatest extent possible (Mikuriya, 2007).

## 2.8 Improving logistics performance

South Africa is the prime economy in Africa and is one of the most developed in sub-Saharan Africa. South Africa is a member of BRICS (Brazil, Russia, India, China and South Africa), an association of five major emerging market economies and is also at the centre of intra-regional trade in sub-Saharan Africa. The South Africa Customs Union (SACU) partners are therefore all vulnerable to disruptions in South Africa's ability to trade. Most of these

countries' international trade passes through the Port of Durban as transit cargo (Potgieter et al., 2015).

Furthermore, the Port of Durban is the key multi cargo port in Southern Africa, handling container, break-bulk and bulk cargo for the local and inland areas of South Africa as well as the Southern African Development Community (SADC) in general. The port handles wide-ranging freight transport movements in the region. In addition, the port is significant to local manufacturing and service industries and economic activities (including cement, solid waste disposal, and petroleum as well as chemicals distribution) also provide demand for freight. In this case, the systems that guide the processes should be advanced or automated to keep pace and avoid traffic congestions. Because of the need for an effective customs control system as a mechanism for revenue collections, a new customs legislation was developed (Potgieter et al., 2015).

The transportation sector is a major contributor to South Africa's competitiveness in global markets. The country's transport infrastructure is well developed and amongst the best on the continent. South Africa has eight main commercial ports. Some focus almost exclusively on bulk commodities (Richards Bay coal terminal), while others serve one major industry only (Mossel Bay serves the offshore oil industry). Durban was previously the largest container handling facility in the southern hemisphere (overtaken in recent years by Jakarta, Indonesia). Ngqura, which opened in 2009 near Port Elizabeth in the Eastern Cape, is the deepest container terminal in Africa.

Furthermore, South Africa, like other developing countries in the world is faced with the triple challenge of poverty, unemployment and income inequality. South Africa is recognised as a key emerging market along with other members of the BRICS group, namely Brazil, Russia, India and China.

### 2.9 Contemporary status of the Port of Durban and traffic congestion

Durban, like all port cities around the world, has its growth path. European port cities tend to evolve into general ports, while those in Asia have tended to evolve into regional and global hubs (Ducruet, 2011). While reasons may differ, governments, cities and regions both in developed and developing countries have often made port development a priority, citing it as an important driver of economic growth. It is important to understand the factors that support and limit growth in cities, as well as what drives and limits growth and productivity in ports. Shared issues include congestion, environment (air quality, noise, visual impact), safety,

effective land and asset use, service and cost. Both city and port growth strategies need to be integrated. Seaports operate within city environments, and both entities also have common stakeholders (Ducruet, 2011).


**Figure 2. 4 Roads in the South end of the Port of Durban**

Source: Aurecon (2015) – New South Ports Combined Roads Project

### 2.9.1 Roads in the Port

Bayhead road is the major route used by heavy container trucks passing through the Bayhead area to the Durban Container Terminal Pier 1 and Pier 2. It is a dual carriageway heading East towards the port from the surrounding southern suburbs of Durban, Umbilo, Wentworth, Jacobs and Seaview. It is the only arterial road linking the major container terminals and other smaller terminals at the port. As can be seen in Figure 2.4 above, it has two major

intersections, South Coast Road at its western end and Langeberg Road in the middle. It has a number of minor intersections along its length (Aurecon, 2015). It is frequently congested by trucks headed in the direction of the port and is impassable for many hours of the day (Pieterse et al., 2017). The majority of these trucks come from or are destined for the various depots where they are de-stuffed and containers are returned empty to the container terminal.

The Durban Harbour Carriers Association (DHCA) which represents the various trucking companies operating in the Port of Durban at the Durban Chamber of Commerce holds regular consultative forums with Transnet regarding strategies to deal with road congestion and truck delays in the Port. Trucks wait between fourteen and twenty hours in the roads in the port precinct before they are granted access to the DCT or Pier 1 container terminal to pick up containers. Chief among its complaints by the DHCA is that Transnet sends out official notifications to the industry saying that the traffic situation is under control, but the operators know that their trucks are stuck in the queues to the port. This waiting also drives up their operation costs as drivers have to be paid overtime as well as costs associated with trucks idling. If the container has not been collected with the free 72-hour storage period, exorbitant penalties are payable by the operator. (Comins, 2018)

| **Number of Days** | **Tariff per Container Type (USD estimate)** | |
|---|---|---|
| | 6m/20' | 12m/40' |
| Day 1 - 3 | Free Storage Days[8] | |
| Day 5 - 6 | R168.00 per day | R338.00 per day |
| Day 7 onwards | R1095 per day | R2186 per day |

**Table 2. 2** Storage fees for import containers

Source: TPT Tariff book (2018)

[8] The first 3.25 days (78 hours) are free. The free period commences from 00h01 on the day the vessel completes discharge of cargo until the container leaves the gate or is loaded for rail or until the 78 hour period is reached.

Container cargo that is uncleared or detained by customs for inspection purposes is removed to licenced depots by the terminal operator, like Transnet Port Terminals (TPT) or by the carriers. Approximately 90% of containerised cargo is cleared for customs within the free three days of storage and less than 10% is moved to bonded warehouses where it stays an average of seven to eight days. Less than 1% of this cargo ends up as abandoned cargo[9], which is then taken to a state auction. TPT reports that almost half of the truck operators only collect their containers in the last free day of storage. Peak periods of collection are during daytime hours which coincides with the general commuter traffic of the city. Major role players in the containerised cargo transport sector acknowledge that introducing a punitive storage charge after the last free day is beneficial on the dwell time of cargo at the Port of Durban (Kgare et al., 2011).

### 2.9.2 Port capacity and development

The Port of Durban has dedicated berths for the various cargo types it handles. It has seven dedicated container berths at its two container terminals. These include the Durban Container Terminal (DCT) and Pier 1, which was converted in 2005 from being a multi-cargo terminal to a container handling terminal (TNPA, 2019b). Major infrastructure improvement projects to expand the throughput capacity of the existing berths have been implemented in recent years. These include lengthening and deepening three container berths in the north quay of DCT, infilling at Pier 1, Maydon Wharf and berth reconstruction at Island View. Feasibility studies have also been completed regarding the construction of the Durban Dig-out Port, which will be situated about 11km south of the city (TNPA, 2019a).

In 2018 the container berth capacity stood at 2.9 million TEUs per annum which was a drop from 3.3 million TEU per annum in the previous year. This was as a result of the berth deepening project at DCT which rendered at least three berths decommissioned for operation. During that period, the container demand exceeded container terminal capacity. Incremental berth capacity growth over the coming years is anticipated, in 2023 to 3.8 million TEUs, in 2027 to 5.1 million TEUs, in 2028 to 5.5 million TEUs and in 2037 to 7.9 million TEUs per annum. This growth in container capacity anticipated in the Port of Durban will be as a result of the completion of the berth deepening project in DCT, the completion of the first phase of

[9] Unclaimed cargo in 28 days or more

the Salisbury Island Infill project and the completion of the Durban Dig-Out Phase 1 respectively (TNPA, 2019a).

(Scholtz, 2017) suggested that the Port of Durban should constantly be expanded to meet the ever-growing demand of container space. It would also have to increase the container stacking yards in both Pier1 and the DCT in order to meet maximum potential capacity. The same should apply to the rail infrastructure in the terminals that connects the port with the hinterland. This capacity of 5 200 000 TEU moves per year would be reached between the year 2027 and 2036.

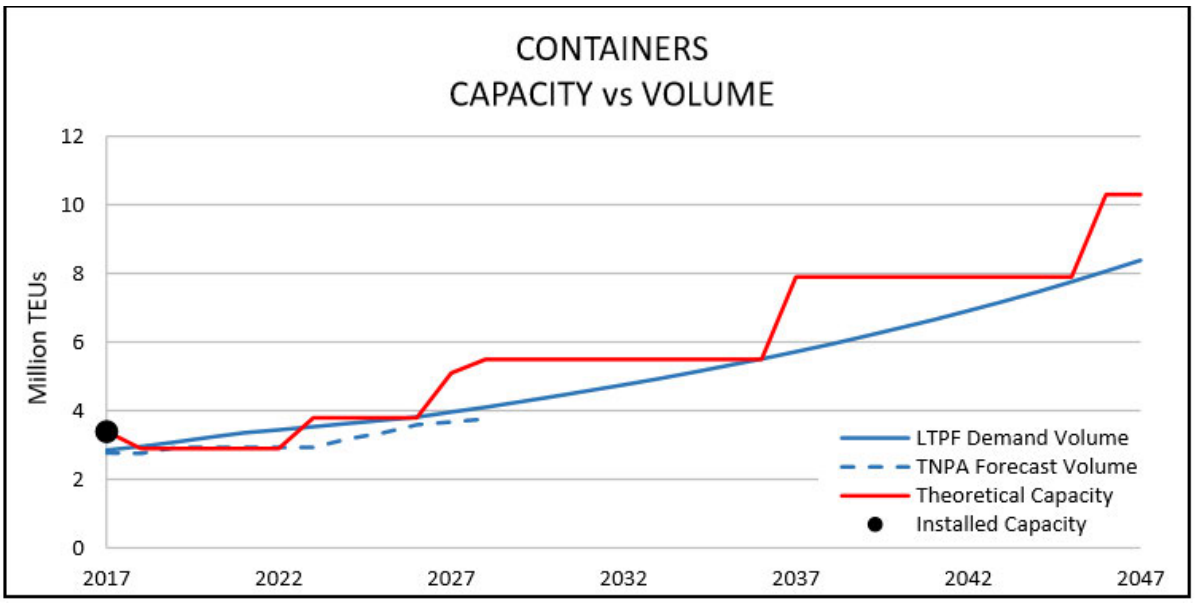



**Figure 2. 5 Future Demand Volume and Capacity – Durban Container Terminal**

Source: (TNPA, 2019a)

### 2.9.3 Truck congestion in the port precinct

Gidado (2015) defines congestion in ports as a phenomenon associated with delays, queuing and added dwell time or voyage of cargo and ships at a port, which always results in unpleasant consequences for supply and logistics chains. These delays often translate into extra costs, disruption and sometimes loss of trade and transport agreements.

Before deregulation in the late 1980's, all long-distance containers were transported by rail trucks from the seaports to the country's hinterland. Local short-haul cartage around the sea ports areas of under 50km were undertaken by private trucking companies. However, this situation changed after deregulation and the successful court challenges that were persistently

pursued by the Durban harbour carriers. Individual and small private trucking companies have become the main role players in both the short- haul around the EMA as well as the long-distance haulage into the country's hinterland and inland ports (Sessions, 2013).

Currently, the situation in the EMA is aggravated by the high proportion of freight traffic entering the city via the national routes from the interior into the port, port-related depots and distribution centres handling import and export cargoes. Congestion in the port precinct is worst on Bayhead Road, South Coast Road and Maydon Wharf Road with some recent increases on the Victoria Embankment to the Point Terminal area. Other areas of congestion include the Mariannhill Toll Plaza on the N3 route, where morning and evening peak traffic experiences some delays over a period of several hours before returning to normal rates of flow. The M7 in the Queensburgh vicinity becomes congested at peak traffic hours and the evening peak is aggravated by the surge of heavy traffic, leaving the port area between 16h30 and 19h00. Of the various categories of traffic on the N3, the most significant are vehicles transporting containers, bulk liquid tankers carrying petroleum products, bulk interlink tippers carrying minerals and coal and curtain-sided vehicles carrying break-bulk commodities (Aurecon, 2015).

Due to the extensive transport of containerised cargo to, from and around the Port of Durban the impact of container traffic on the freight routes of the city is a cause for concern. Total containers handled at the port in 2019 were 2 956 670 TEUs of which nearly 2 217 502 TEUs (TNPA, 2019b) are transported in and out of the terminals and between depots and distribution centres. The balance was transhipment containers. A significant proportion of containers are transported to distribution centres, and "full service" depots where they are de-stuffed and the boxes are returned to the shipping line "empties" depots. Other containers are transported to "fulls" depots in order to save on port demurrage and then subsequently delivered to customers, while some are delivered to and collected from terminals directly from inland destinations and KwaZulu Natal (KZN). A further variation in container usage is the practice of delivering empty containers to depots at which they are stuffed with bulk cargo such as minerals, scrap iron and waste paper in order to take advantage of cheaper rates offered by shipping lines to encourage them to repatriate empty boxes. In addition, there are a large number of containers that are transported inland and to industrial areas all over KwaZulu-Natal (Potgieter et al., 2015).

The transport of containers within the EMA contributes a major proportion of road freight movement - with the major impact being experienced on the incoming corridors and immediate feeder roads into the port complex. There has been considerable debate about the potential for reducing container traffic on the road by transferring some of it to rail. The historical situation before deregulation was that all long-distance containers were transported by rail, and short-haul trips relocation around the EMA of under 50km were done by private cartage contractors or the Road Transport Division owned by Transnet at the time. The present situation is shown in Figure 2.6 below (Sessions, 2013). Containerised cargo arriving at the Port of Durban are transported by cargo train to City Deep in Johannesburg. From this main container hub, they are transported by road hauliers to the respective customers in Gauteng areas. Some return empty to "empty" depots and transported by road back City Deep. From City Deep empty and full containers are transported to the Port of Durban by rail to be exported.

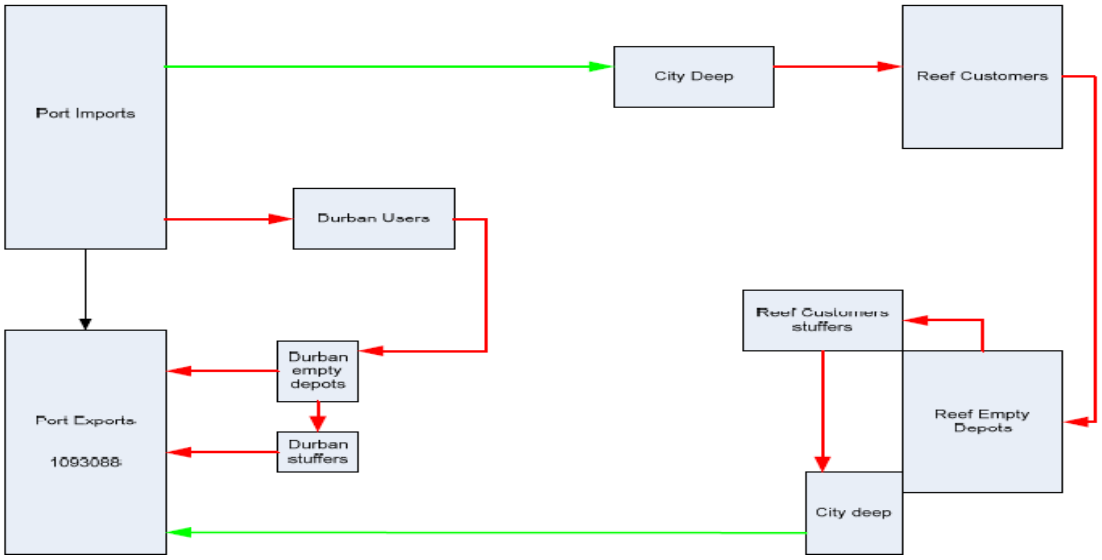
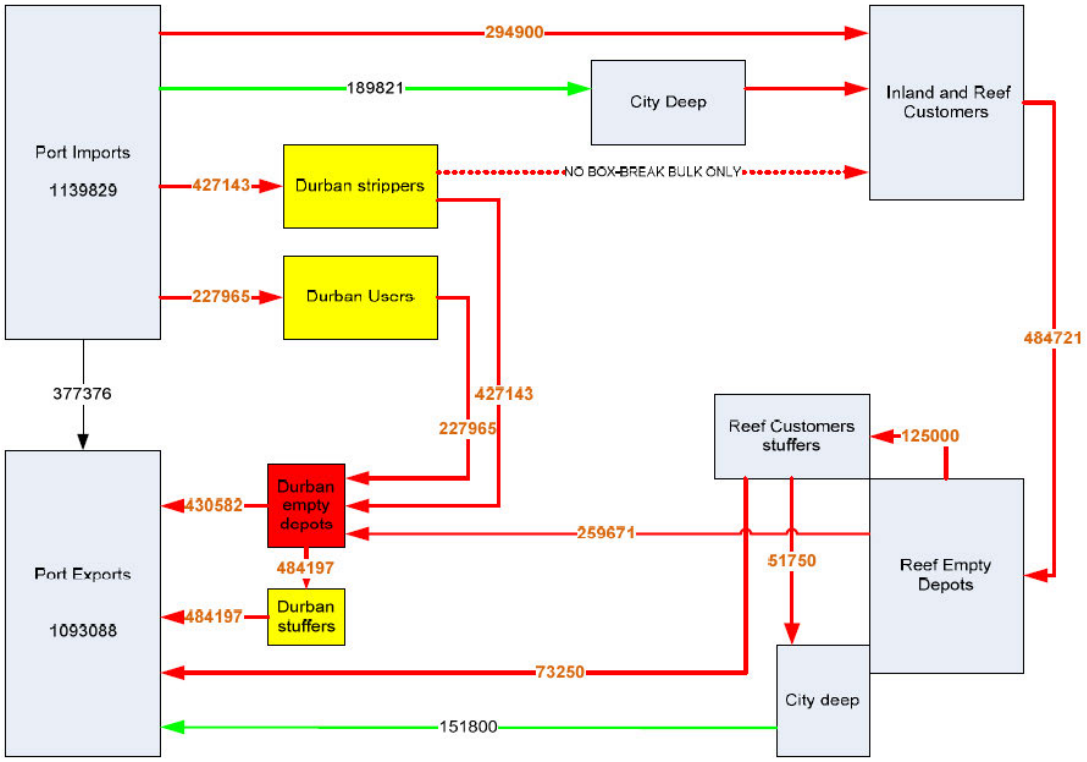



**Figure 2. 6 Distribution of Containers to Inland Destinations**

Source: Sessions (2013)

It is worth noting that ship-owners opted not to have empty container depots situated along the Durban railway lines. Therefore, containers from Johannesburg went straight into the terminal. It was thus more economical to ship them out and use the Durban empty containers for stuffing exports in Durban. As demand for empty containers to stuff in Durban grew, the only extra source was the empty containers from Johannesburg, retrieved from the terminal. After deregulation and the successful challenges by the Durban harbour carriers in the 1990's, the situation changed and the private sector road hauliers became the dominant

carriers of containers, both for the short haul and then increasingly for long-distance haulage as well (Potgieter et al., 2015). Figure 2.7 below depicts these changed circumstances.




*Source:* Freight Train.

Note: (Green lines are rail, and red lines are road)

**Figure 2. 7 Haulage of Containers to and from Inland Destinations**

Source: Sessions (2013)

Traffic studies conducted by Sessions (2013) analysed the above diagram which clearly shows that the flow process has materially changed during road truck traffic flows in the EMA with the following results:

- Of the 1 139 829 containers that were imported into the Durban seaport in 2018, 294 900 were moved by road to the inland terminals and customers by road.
- 189 821 containers were transported by rail to City Deep in Johannesburg and thereafter distributed to the other inland terminals and customers in the reef.
- 427 143 containers were moved by road hauliers to the Durban companies that strip containers and package containerised cargo. The contents are then road-hauled as break-bulk to Johannesburg and the containers are turned in in Durban. This system allows major importers of many lines of a similar product to create a major distribution centre in Durban where imported products can be prepared for

distribution to shopping outlets together with a whole range of other similar products. This allows for one large distribution warehouse to service the entire eastern half of South Africa with road haulage directly to shops.

- 227 965 containers were transported by road hauliers directly to the end-users or customers in the Durban area.
- The 427 143 containers had been dispatched to the container stripping companies in the Durban area and are further re-transported by road to the Durban "empty" depots for storage before being transported by road to the port after being used.
- The same applies to the 227 965 containers that had been dispatched to the end users in the Durban area, they are also transported by road back to the Durban "empty" depots for storage before being transported by road to the port after being used.
- The same process applies to the 484 721 containers that been dispatched to the inland and reef containers; they are eventually transported back to the Port of Durban after being used there.
- Since the area in the immediate port surrounds is in fact double or triple handling a large number of containers, the roads in the area are actually handling over 3 million road container moves per year.
- The high level of truck movement for transport containers has led to a situation where rail has a share of only 16% of the total market and about 30% of the inland long-haul market.
- If the demand for rail transport falls further, the effect will be an increase in the proportion of long-haul transport of containers on the road. However, if the rail service can be re-designed to attract increased container traffic, the impacts will be positive for long-distance haulage but will have reduced impact on the congestion in the core areas around the port.

### 2.9.4 Back of port depots

The handling and storage of empty containers in the container logistics supply chain is of major importance as all imported or exported containers at some stage are processed by stacking at different depots. They are moved through empty container depots after being discharged from the sea vessel or after being loaded for export (Sessions, 2016)

Moodley (2014) stated that there are recurring and unresolved problems with regard to the back-of-port freight logistics in Durban. These are port congestion which has been escalating over time and is aggravated by the size of container vessels visiting the port that is increasing rapidly. The other problem is that space, equipment and facilities are not adequate to handle road vehicle arrival rates. This leads to the road truck delay hours increasing over the years. The ongoing truck congestion, which delays the delivery or collection of containers at the DCT and Pier 1 has often resulted in independent truck operators blockading or threatening to blockade Bayhead Road leading into the container terminals (Peat, 2016).

To alleviate the congestion of cargo destined for the country's hinterland, industrial sites in Cato Ridge, Hammarsdale, Eston and some parts of the Bayhead area should be made available for containerised cargo storage. Various industry experts have suggested a number of other areas that should be explored as container transit areas. These include regenerating the existing warehousing land in the South Durban basin, Congella, Umbilo, Maydon Wharf and Westmead to the west of the city. Other suggestions include establishing a dedicated freight route out of the Durban container terminal that links with the M7 highway and a high-speed railway system running from the port to the country's interior. The Durban Dig-out-port was also suggested, although there were some reservations about the costs that would be incurred in building it (Potgieter et al., 2015).

### 2.9.5 Port Rail Infrastructure and haulage choices

The Port of Durban is supported by an expansive rail network infrastructure. There are rail yards in the Bayhead, Maydon Wharf and King's Rest precincts. These serve trains arriving at the port or carrying different cargo, for example, dry bulk, liquid bulk, vehicles and containers discharged at the various terminals (Sessions, 2013).

According to Sessions (2013) containerised cargo operators preferred to make use of road rather than rail trucks for a number of business-driven reasons:

- Reliability: For containerised cargo owners, the reliability of the mode of transportation determines its efficiency in meeting service delivery requirements of their clients
- Ease of access: Road transport offers all stakeholders high levels of personal contact and accessibility compared with rail transport.

- Security: Cargo owners place a high premium on the security against the risk of theft and pilferage of their containerised cargo while in transit. Road transport offers continuous personal monitoring through modern technology of satellite-based tracking.
- Loss and damage: The major advantage of road transport is its ability to allow the clients to observe and sometimes even supervise the loading of their cargo from the point of departure and its unloading at the destination.
- Administrative considerations: Opting for road transportation allows cargo owners to devote minimal time to administrative activities, costing and payment procedures. They can then spend more of their time on their core business.
- Flexibility: Demand levels in the container business fluctuate constantly. There are short-term surges and valleys in business and there needs to be rapid response in delivery requirement levels. Road transport offers greater flexibility to cope with these periodic demand levels.
- Cost: Container operators planning to move imported containerised cargo to inland ports have a number of possible options to choose from. Total transport costs are a major consideration when making these modal decisions.

Scholtz (2017) also suggests the implementation of a dry port as part of the "masterplan" to address the road truck congestion in the roads of the Port of Durban. Two possible locations were proposed for the implementation of a dry port. The first one would be an area located close to the Durban Container Terminal. The other one is the old Durban Airport site (DDOP) which is situated approximately 11km from the Durban Container Terminal.

### 2.10 Inland ports and dry ports

Most of the landlocked developing countries are challenged by their physical isolation from their international trading partners which results in the high cost of trading as well as supply chain-related barriers (United Nations Commission for Africa, 2013). Inland ports developed and evolved with the aim of addressing these geographic isolation challenges. Over the past few years, ship sizes and the carrying capacity of the container vessels have been growing exponentially, thus putting severe strains on the container terminals in handling the higher volumes of export and import cargo in a regular manner. This seaport capacity challenge resulted in congestion due to extended waiting times of road trucks and other haulage

vehicles. The evolution of inland ports has also been driven by the need to address this challenge (Woxenius et al., 2008).

Although the definition of dry ports and their function has evolved over the years, the generally accepted definition of a dry port is that it can be regarded as “an inland intermodal terminal directly connected to seaports with high capacity transport means, where customers can leave and pick up their standardized units as if directly to a seaport”. Dry ports are dedicated areas to which exports and imports can be shipped for inspection by customs (Roso & Lumsden, 2009).

A dry port concept has developed in the past few years, and its aim is to increase cost-efficiency as well as to take into account the environmental considerations of a transportation system. Dry ports can be differentiated by their distance from the seaport such as close, mid-range and distance dry ports. They can also be differentiated by location such as seaport-based, city-based and border-based dry ports (Beresford et al., 2012). (Scholtz, 2017) states that, “a dry port is an inland terminal at a location outside of the main ports where storage, stacking, distribution and transportation promote overall efficiency of the maritime port, which in turn enhances the development of the port that it is associated with”.

The term “inland port” is usually used in a narrow sense in the transportation systems arena to refer to a more specialised facility that has developed with the existence of the intermodal container. Rather than cargo being loaded and unloaded at the seaports, shipping containers can be transferred between the vessel and a road vehicle or a cargo train. The container can be used interchangeably between a road truck and a cargo train elsewhere, and cargo is only loaded or unloaded at either the point of their origin or their destination (Goodger & Marais, 2013).

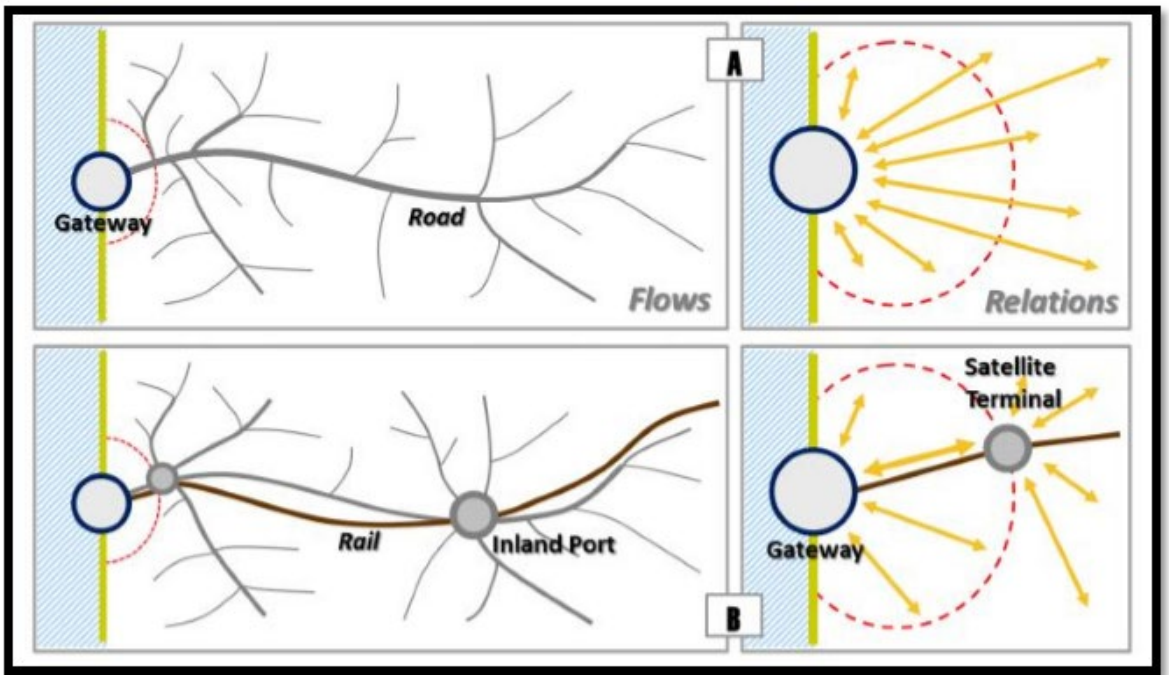



**Figure 2. 8 Changes as a result of a dry port and the effect it can have on the movement of cargo.**

Source: Rodrigue, et al. (2013)

In Figure 2.8 above, Diagram (A) shows modal shift and inland freight diversion before the insertion of an inland port and satellite terminal and (B) shows the shift after the insertion of an inland port and satellite terminal. Adapted from (Rodrigue et al., 2013)**.**

Inland ports are of strategic importance in the transportation value chain of containerised cargo from the seaports to the hinterlands in a country. They are, therefore, specialised centres or locations developed to serve intermodal transportation networks (Khalid, 2012). These centres also provide storage facilities, consolidation and deconsolidation of cargo, maintenance duties for the rail or road carriers and customs clearance functions (Jeevan et al., 2015). The location of inland ports is well planned to provide a support function for storage and customs clearance space. Its performance as a containerised cargo operation hub is dependent on the quality of the rail and rail interface. Inland ports are utilised with the objective of improving the congestion resulting from increased container flows and a focus on security systems and control by the use of information systems (Roso, 2007).

## 2.11 Inland ports in East Africa

Dar Es Salam and Mombasa seaports in Tanzania and Kenya respectively are the international gateways to eastern Africa from the Indian Ocean. Like in the rest of the shipping world, the development of inland ports and their expansion in these two countries was due to national economic growth and increase in the volume of trade. This, in turn, has resulted in a sharp rise in the demand for port services, resulting in a failure to meet cargo capacity needs which caused inefficiencies and operational bottlenecks (Gujar & Yan, 2010). These two countries experienced a number of challenges in the expansion and infrastructural developments of their inland ports due to limited land or the high cost of land, coupled with with the costs of relocating local inhabitants and financial compensation for the appropriated private property which had to be procured to pave the way for the ports' developments. Andrew Roberts (2013), stated that growth in the national economy and sea trade in East Africa has led to increased seaport activities, traffic jams and congestion at Mombasa seaport too (Roberts, 2013).

Many developed and industrialised nations have established inland ports as a solution to the capacity challenges of their sea ports. East Africa lags behind Asia and Europe in both the volume of trade and port development, nevertheless, it has not escaped the above trend (Werikhe, 2015).

## 2.12 Dry ports in South Africa

From across the world and the African continent, there is clear evidence that exports play a crucial role in a nation's economic growth and economic development. However, by and large, most countries in the continent of Africa face serious challenges of growth and development as they have not been able to successfully integrate with the world economy. The challenges faced include their adverse geographic locations, poor institutions and transport costs (Cronje et al., 2009).

Goodger & Marais (2013) state that an inland port is a logistical hub which is developed to move international cargo efficiently and effectively through the country's seaports. The logistics of inbound freight can be compared to a barbell balanced by containers travelling in from one end into the sea port to get into cargo warehouses and those being loaded onto trains and road trucks for the final destinations. If for some reason, the containers are not moved speedily, they create a bottleneck which blocks the entire distribution chain as

containers are delayed to be discharged from the ships before being transported. The barbell becomes unbalanced.

Among the six inland terminals that South Africa has, City Deep is the biggest one in terms of both size and container throughput capacity. Inland terminals are situated in the various provinces of South Africa: the others are Belcon, Deal Party, Preston, Bayhead and Bloemfontein. City Deep is located in the Gauteng province in the south of the Johannesburg Central Business District (CBD). It is the largest container terminal in the country and handles import container traffic, export traffic and domestic traffic. Among the six inland terminals in South Africa, it is the only inland terminal that functions as a dry port. The other five inland terminals handle only domestic traffic, whereas City Deep handles container cargo both from abroad and domestic, which includes customs clearance functions (Cronje et al., 2009). It also handles and consolidates 60% of the traffic of the container from the ports of Durban, Ngqura and Cape Town and also acts as an exchange platform for trade into the countries of the South African Development Communities (Transnet Port Terminals, 2018)

The City Deep inland port is connected with the other inland terminals and the country's seaports via intermodal transport. It has a container handling capacity of 400 000 TEUs per year. The terminal can handle up to 300 trucks a day for both imports and exports and up to ten trains a day between Johannesburg and Durban. Trains and road haulage trucks are used to transport containerised cargo from the seaports to City Deep and vice versa. It also has a direct connection with other types of terminals, for example, airports via road transport (Nevin, 2016a).

### 2.12.1 Functions of inland ports

According to Padilha, & Ng (2012), there are certain core functions that an inland port should be able to perform in order to meet its objectives:

- Distribution – large shipments are split into smaller consignments for local delivery to retail centres or cargo is transferred between rail, road and maritime shipments.
- Consolidation – this task is adding value to the consignments by connecting the transportation of the goods with handling processes. This is done by linking the delivery of a group of miscellaneous items into a single product.

- Processing – this task aims to increase the value of goods being transported. It can be achieved by assembling, packaging, sorting or any other process that adds the value of the goods along the value chain.
- Customs inspection - One of the key functions performed at this terminal is customs clearance, which is conducted by border police. They inspect all the required documents for cargo, seals on the containers, description codes, and also ensure that imports comply with the import/export regulations of the country.

Goodger & Marais (2013) also state the benefits of inland ports as:

- Increased trade flow
- Lower door-to-door freight rates
- Avoidance of demurrage, storage and late documentation fees
- Optimal use of road and rail transport
- Lower customs costs
- Better utilisation of capacity

When compared to other countries internationally, South Africa is unique in that the nearest inland port is situated at least 600 km from the nearest main feeder sea ports. The country is also a transportation corridor to many neighbouring land-locked countries and others with less developed infrastructure. Almost all these countries rely on South Africa's road, rail and port storage infrastructure in their international trade by sea (Aurecon, 2015).

## 2.13 Conclusion

The literature review has been useful in providing a context for the study utilising available literature. This chapter has detailed the key points regarding the legislative framework regulating customs clearance of containerised cargo at both the seaports and the inland ports in South Africa. International trade instruments and regional trade agreements also play an influential role in informing the policy of customs authorities. The role played by the country's inland dry ports in alleviating congestion in the roads and the supply chain into the country's hinterland was also discussed. The next chapter outlines the method used to undertake the research.

# CHAPTER 3: RESEARCH METHODOLOGY

## 3.1 Introduction

Research is a scientific and systematic enquiry into the available sources of information on a specific topic with the objective of solving a particular problem or improving the understanding of certain phenomena. Research is imperative for social scientists in studying social relationships and seeking answers to diverse social problems. It also has practical value for the social scientist to know and improve the manner in which systems are operated (Kothari, 2004). Research is a vehicle for arriving at a desired solution for a given problem after having completed an organised and orderly investigation that entails the collection and analysis of data. It could also be an examination carried out to arrive at the truth as perceived from the researcher's unique perception of the phenomenon (Sekaran & Bougie, 2013).

Qualitative research aids researchers to study ambiguous problems of varying complexities by providing unlimited views of a given situation and a number of variables. It also provides the researcher with more depth and detail to the answers (Raich et al., 2014). Qualitative data can be obtained from diverse sources like news articles, interviews from individuals, the internet, journals, books and other sources (Sekaran & Bougie, 2013).

Cresswell (2014) states that in a qualitative approach data may be collected from various sources using different instruments like interviews, observation, audio-visual materials and documents (Cresswell, 2014). Qualitative research is concerned with an assessment of subjective opinions, behaviour and attitudes. These are referred to as subjective because it is not possible to measure or quantify them. They may also not be subjected to rigorous examination and analysis in a formal fashion as in a quantitative approach (Kothari, 2004). When designing a study, it is essential to understand the difference between qualitative and quantitative research before the research technique is chosen as methodologies have their specific strengths and weaknesses. Qualitative data analysis is the classification and interpretation of linguistic or visual material to make statements about stated and implied dimensions and structures of meaning-making in the material as well as what is represented in it (Flick, 2014). This definition can be applied to both subjective or social meanings. Qualitative data analysis is also used to discover and describe issues in the field of structures and processes in procedures and practices. Qualitative data analysis invariably combines approaches of an irregular analysis of the material (overviews, compression, summaries) with

techniques of a detailed analysis (explanation of groups, hermeneutic interpretations or identified structures). The final aim is to reach the generalisable statements by comparing various materials or texts and cases (Flick, 2014).

### 3.2 Need for the study

Customs clearance of containerised cargo in South African ports is processed under the Customs and Excise Act 91 of 1964 (CEA). Section 38(1) of this Act states that, "every importer of goods shall, within seven days from the date on which goods are deemed to have been imported in terms of section 10, except in respect of goods in a container depot as provided for in section 43(1)(a) or within such time as the Commissioner may prescribe by rule in respect of any means of carriage or any person having control thereof after landing, make due entry of those goods as contemplated in section 39". This Act allows containerised cargo to move directly to inland ports upon arrival at sea ports.

On the other hand, section 90(1) of the Customs Control Act 31 of 2014 (CCA) states that, "a clearance declaration meeting the requirements of section 171(a) to (d) must, subject to subsection (2) and (3) and section 908, be submitted to the customs authority within three working days of arrival". This legislation requires all sea cargo imported and exported from the ports in South Africa to be cleared at the ports of entry. The implication of this requirement is that the existing "dry ports" like City Deep in Johannesburg will no longer be designated places of entry or exit for customs purposes. They will in effect be downgraded to ordinary depot status, at which the custom function will be limited only to inspection. All imported containers will have to be off-loaded from the vessels at the Port of Durban for customs clearance by SARS. This means that more stacking space will be needed at the container terminals as containers will no longer be loaded directly onto cargo trains to be customs cleared at City Deep. Transnet Port Terminals will need to have additional container handling equipment due to increased volumes in its terminals. Most containers that would otherwise have been transported by trains will have to be collected at the terminals by road trucks to be taken to the country's hinterland destinations. The roads in and around the Port of Durban are currently congested even though at least 15% of containerised cargo currently travels by bonded train to City Deep as is permitted by the Customs and Excise Act 91 of 1964. The requirement to perform custom clearance formalities at the sea ports will result in additional road traffic on the roads in the Port of Durban and between Durban and Johannesburg.

### 3.3 Aim of the study

Having outlined that the introduction of the CCA brings about drastic changes in the customs regime with regard to the clearing of containerised cargo in South African sea ports, the overall aim of this study is to explore the implication of the CCA for the road congestion and flow of containerised cargo from the  to various destinations within the KwaZulu-Natal province and the hinterland.

### 3.4 Methodological approach

Having chosen the topic of the research, stating the research problems and objectives, the next step was to identify the most suitable research methodology to be adopted for this study. Document analysis was chosen due to the nature of the research which is mainly about the changes in the legislative requirements in customs clearance of containerised cargo in the ports of South Africa as is espoused in the CEA compared with the same requirements under the CCA. Bowen (2009) suggests that document analysis is a qualitative research method that can be used by the researcher to interpret documents and therefore be able to give meaning and voice on a topic under assessment (Bowen, 2009).

In this approach, documents are analysed for their content which is then coded into themes with a purpose of finding similarities, contrasts and contradictions and the frequencies of each of these. It is a social research approach which is indispensable to most schemes of triangulation, which is the combination of methodologies when studying the same phenomenon (Bowen, 2009). The decision to use a qualitative approach was prompted by the legal nature of the study. This approach allowed the researcher to describe the body of the two relevant laws and to examine their possible impact on the flow of containerised cargo in the roads in the Port of Durban. Various researchers (Kumar et al., 2017); (Ary et al., 2013); (Neto et al., 2015) revealed a kaleidoscope of approaches to document analysis. It is an approach that is flexible enough to adapt to the unique requirements of their studies while retaining its distinction as a notable scientific method of research.

There is no universal approach to document analysis, as there are diverse ways to analyse documents. However, in the context of textual and legal documents, Flick (2014), suggests that a generally acceptable approach in this method is to distinguish between what the documents look like in terms of the form and language they are written in as well as their

purpose and the intertexuality between them. Kumar et al. (2017) state that document analysis assists in combining information which is similar regarding specific purposes, ideas, methods and applications. This method is conducive to the expansion of knowledge to a given phenomenon that requires historical contextualisation. For this reason, the researcher has adopted a question-led approach to the study, an approach similar to that followed by Neto et al. (2014). They describe document analysis as a research technique that uses various documents as its source, analysing them in-depth to extract information and indications relative to the object of the study.

### 3.5 Research objectives and questions

The CCA brings with it a myriad of changes for the South African role players in sea-borne global trade. These include cargo owners, freight forwarders, ship operators, ship agents, cargo clearing agents and TNPA which is a landlord division of Transnet for the container terminals, railway lines and roads in the Port. Among the changes brought about by CCA is the reduction in the number of days to clear the containerised cargo for customs from seven days to three days. The other change in the CCA is the requirement that all customs clearance procedures are performed at the first port of entry in the country, not at an inland port as is currently permitted by the CEA. These changes bring about a number of new challenges as stated above in Section 3.2.1, leading to the following objectives and research questions for this study.

**Table 3. 1 Research Objectives and Questions**

| Objective | Research question |
|---|---|
| 1. To examine the impact of the implementation of the CCA in the clearance of containerised cargo in the Port of Durban | ➢ What were the reasons for its promulgation?<br>➢ What are the implications of customs clearance formalities being performed at the seaport or the inland ports?<br>➢ What are the implications of the change in the number of days permitted to perform customs clearance formalities?<br>➢ What is the net effect of the CCA on the congestion of the roads in the Port of Durban in its current form? |
| 2. To investigate the container distribution patterns from the Port of Durban to local, regional and hinterland destinations | ➢ What are the current container distribution patterns from the Port of Durban to local, regional and hinterland destinations<br>➢ What impact does the new CCA have on the roads in the Port of Durban will they be improved or worsened? |
| 3. To understand the role played by inland ports in easing traffic congestion in the Port of Durban | ➢ How do inland ports contribute to easing traffic congestion in the Port of Durban?<br>➢ What are the implications of the new CCA for the inland ports in South Africa? |

The requirements for customs clearance of containerised cargo under both the Customs and Excise Act 91 of 1964 and the Customs Control Act were read in-depth to search for information that could guide the study. In both pieces of legislation, the regulatory frameworks for customs clearance of containerised cargo at the seaports in South Africa were thoroughly examined. Table 3.2 below lays out the themes in both the CEA and CCA to be examined and then plan to answer specific research questions. The themes are extracted from the purpose for which the Acts were promulgated and classified in a tabular format.

**Table 3. 2 Themes in CEA and CCA**

| GUIDING QUESTION | PURPOSE OF QUESTION |
|---|---|
| What are the implications of customs clearance formalities being performed at the seaport or the inland ports? | Check if there are any changes that come about as a result of the implementation of the new customs legislation |
| What are the implications of the change in the number of days permitted to perform customs clearance formalities? | Check if the reduction of the number of days for customs clearance in the CCA has any effect on traffic congestion in the Port of Durban |
| What are the current container distribution patterns from the Port of Durban to local, regional and hinterland destinations? | Recognising that imported containers at the port do not always travel in a linear pattern to their hinterland destinations |
| What changes the CCA will have on the roads in the . Will they be improved or worsened? | Check if the requirements to perform customs clearance formalities at the Durban seaport leads to changes in the traffic patterns on its roads |
| How do inland ports contribute to easing traffic congestion in the Port of Durban? | Check if there is a reduction of road traffic by performing customs clearance activities |

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| | at the inland ports |
| What are the implications of the CCA for the inland ports in South Africa? | Check if the requirements to perform customs clearance formalities at seaports affect the sustainability of the existing inland ports in South Africa |

### 3.6 Data Selection

Secondary sources comprise an extensive review of data from academic writing that comprised both theoretical and practical information. These included published and unpublished theses written on the subject on customs clearance and the truck congestion on the roads in the Port of Durban. Professional reports that have been prepared for the TNPA on the issue of road congestion around the port were also consulted. Other sources were published materials in the form of textbooks, journals, general comments on the congestion in the Port of Durban, newspaper articles related to customs clearance and road congestion in the Port.

A comprehensive survey of the transport industry literature, including in-house Transnet publications on rail and ports infrastructure, was also conducted. The Transnet library assisted in obtaining journals that were used in collecting data, reports and industry statistics. The online database helped in obtaining data on reports and relevant information.

#### 3.6.1 Data selection and reliability

The SARS website was deemed sufficient as a primary source of data for the study as both pieces of legislation under study are entities of this organ of State. A critical analysis of the provisions for customs clearance of containerised cargo in the South African seaports under both legislations was conducted.

#### 3.6.2 Validity of data

Any measuring instrument is said to be valid when it measures what it is expected to measure (Pandey & Pandey, 2015). The document analysis research was designed to evaluate the possibilities of changes in the traffic congestion in the roads of the Port of Durban as a result

of the implementation of the CCA. Validity will ensure that the research regarding these variables is reliable and true. It means that individual scores of research methods are meaningful and contribute to acceptable conclusions from the sample population to be studied (Mohamad et al., 2015). Validity is a test to determine whether a study actually measures what it is originally intended to address and is also a measure how close it is to the reality it purports to have achieved (Freedman, 1987). The validity of the study is dependent on the ability of the researcher to manage the systems that are used during the collection of data and analysis. It is therefore of critical importance to ask the right questions in the correct way and at the right time to achieve valid, reliable and usable assessment information (Brief, 2012).

In this study, data were evaluated as the published information is not always trustworthy or reliable. Therefore, data was questioned and cross-examined or checked by going back to the source and evaluating the methods used to obtain that data. This assisted the researcher to reach more reliable and valid conclusions. In the case of this study, the sources are the SARS website and Transnet and the data in question are the two customs Acts which are available and accessible for any reader to validate the claims made by the researcher regarding the data.

### 3.7 Ethical considerations

The researcher applied for ethical clearance from the Research Office at the University of KwaZulu-Natal, and it was granted on 21 January 2021. The ethical clearance number is 00005928, the proof is attached as Appendix B. The researcher followed the guidelines as per the ethical clearance.

### 3.8 Conclusion

The aim of this chapter has been to consider a number of qualitative tools available to the researcher for the gathering and processing of data. Various research methodology techniques were explored. It is essential for the researcher to ensure that the research technique to be used is studied and examined in order to find the most suitable research design for the study. In this study, a mix of document analysis and content analysis is used to examine the different pieces of customs legislation, relevant scholarly literature and publications on

container customs clearance. Chapter four will contain the presentation and discussion of the results of the study.

# CHAPTER 4: FINDINGS AND DISCUSSION

## 4.1 Introduction

The aim of this study is to explore the impact of the implementation of the Customs Control Act 31 of 2014 on the road congestion of the Port of Durban. Data utilised to aid the study was collected from both the SARS and Transnet websites as well as the Transnet library. The selected research method is document analysis. The legislative requirements for customs clearance of containerised cargo under the Customs and Excise Act 91 of 1964 were explored and compared with the same requirements for customs clearance of containerised cargo under the Customs Control Act 31 of 2014.

This chapter presents, interprets and analyses secondary data that has been collected from the relevant pieces of legislation and other studies that have been conducted on the road congestion in the Port of Durban. The science behind transport economics and port operations as discussed in literature, where appropriate, has been utilised to validate the research findings in this chapter.

## 4.2 Legislative background

Customs legislation is a regulating instrument of the government of South Africa and falls under the responsibility of the Ministry of Finance. It is a division of the South African Revenue Services (SARS). The Finance Minister appoints the Commissioner who will have powers to enforce the Act on behalf of the Minister. The Customs and Excise Act 91 of 1964 was written at a time when the country's focus was on the safety of the country's borders and the collection of import duties.

The Customs Control Act 31 of 2014 replaces the Customs and Excise Act 91 of 1964. It is also concerned with the control of goods imported into or intended for export from the country. The overarching purpose of customs control is to ensure that any form of taxes imposed by other laws on internationally traded goods are collected and also that other various laws regulating the export or import of specific cargo are complied with. The first paragraph of the CCA states that South Africa's customs legislation has not kept pace with technological advances and does not fully reflect the modern standards of the Revised Kyoto Convention. Its objective is to align with international instruments and at the same time

conform to the local customs control objectives. One of the challenges faced by customs administration is to find a balance between customs control and trade facilitation.

Over the years of its existence, the CEA has been repeatedly amended and updated to keep in line with the developments in the international trade arena and to modernise the system. Despite the various amendments of this Act, its inherent structure remained unchanged and, as a result, it still bears elements of rigidity that are reflective of the old era in which it was written. Its layout does not follow a logical plan or pattern. It comprises 12 chapters and has 185 sections, numbered from 1 to 122. Some of these sections have alphabetical labels while others are just numerals. The CEA can be described as not being user-friendly and only seasoned practitioners who have worked with the Act over many years can navigate its layout and able to understand and interpret its provisions.

The dissection of the CEA and rewriting of the new customs legislation was an enormous task and took many years to finalise. The research that preceded the rewrite began in 2003. Initial drafts of the Customs Control Bill (CCB) and the Customs Duty Bill (CDB) were only published in 2007 (Mavropoulos, 2016).The Customs Control Act 31 of 2014 is written in a more logical and systematic pattern, and its format follows the sequence of the international trade flows supply chain. Provisions covering the same topic have been grouped together and arranged into sections. It also incorporates footnotes to provide links with other provisions pertaining to a specific section. The CCA comprises 41 chapters and has 944 sections.

In this study, document analysis was adopted as the best approach to assess secondary publically available data on the SARS website, wherein both pieces of legislation under discussion are obtainable. Relevant clauses in both the Customs and Excise Act 91 of 1964 and the Customs Control Act 31 of 2014 were identified and provisions for customs clearance under each Act were tabulated.

**Table 4. 1 Presentation of Results from the Document Analysis**

| **GUIDING QUESTION** | **PURPOSE OF QUESTION** | **Customs and Excise Act 91 of 1964** | **Customs Control Act 31 of 2014** |
|---|---|---|---|
| 1.What are the key sections that distinguish the two customs legislations in regard to the customs clearance requirements | Check if there are major differences between the two pieces of legislations | *(a) Point of customs declaration*<br><br>s38(1)(b) states that, "the Secretary may allow or make due entry of imported goods, in the form prescribed and declare to the truth of such entry at any place appointed under the provisions of this Act".<br><br>*(b)Number of days allowed to complete customs clearance*<br><br>s38(1)(a) states that, "every importer of goods shall within seven days of the date of entry on which goods are, in terms of s10 be deemed to have been imported". | *(a) Point of customs declaration*<br><br>s 90(a) states that a "customs declaration must be submitted at the customs seaport where goods are to be off-loaded from the vessel".<br><br>*(b) Number of days allowed to complete customs clearance*<br><br>s90 (1) states that a "clearance declaration meeting the requirements of s171 (a) to (d) must, subject to subsection (2) and (3) and s908 be submitted to the customs authority within three working days of arrival at the |

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| | | | port of entry". |
| 2. What is the road truck traffic situation in the Port of Durban? | Check if the requirements to perform customs clearance formalities at the Durban seaport leads to changes in the traffic patterns on its roads | Approximately 26% of containers imported into Durban in 2018 were transported by road to inland terminals<br><br>Main roads in the port precinct are regularly congested with container trucks in some instance for up to 24 hours. | All imported containers are subject to customs clearance procedures at the Port of Durban for customs clearance declarations before being transported to the various destinations, including the country's hinterland.<br><br>More trucks queue along the main roads in the port waiting for the containers to be released from the terminal. . |
| 3. What are the current container distribution patterns from the Port of Durban to local, regional and hinterland destinations? | Recognising that imported containers at the port do not always travel in a linear pattern to their hinterland destinations | Approximately 37,5% containers imported to the Port of Durban in 2018 were moved by road hauliers to the Durban companies that strip and package | Additional containers are moved by road to the cargo consolidating warehouses around the Durban area before being transported to the |

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| | | containerised cargo | local, regional and hinterland destinations |
| 4. What is the role played by the rail network in the transportation of containers to the hinterland destinations? | Check if the rail transportation plays a contributing role in easing traffic congestion in the roads in the Port of Durban | Approximately 17% of containers imported to Durban in 2018 were transported by rail to inland ports in bond on basis of a manifest section 38(1)(d) of CEA | The cargo manifest terminates in the Port of Durban; customs clearance formalities are performed. Cargo owners have a choice of road or rail transportation to the hinterland destinations. Section 90(1)(a) of CCA |
| 5.How do inland ports contribute to easing traffic congestion in the Port of Durban? | Check if there is a reduction of road traffic by performing customs clearance activities at the inland ports. | Approximately 17% of imported containers in the Port of Durban travel in bonded trains to City Deep in Johannesburg where customs clearance formalities are performed. They do not form part of the road in the port.<br><br>Less container traffic on the roads in the port precinct | With no customs clearance formalities permitted in inland ports, fewer containers will be handled here. Cargo owners have a choice of using road transport from the Port of Durban to consign cargo directly to their customers in the country's hinterland.<br><br>Additional containers are added |

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| | | | to the road network in the port precinct. |
| 6 What is the influence of customs legislation to the existence of inland ports in South Africa? | Check if the requirements to perform customs clearance formalities at seaports affect the long term sustainability of the existing inland ports in South Africa | Containers are moved from seaports in bond to the inland port on the basis of a cargo manifest. Customs clearance is done at the inland port | Cargo manifest terminates at the seaport and customs clearance is done there. With no customs clearance functions at inland port, it remains just a container depot. |
| 7 What are the implications of customs clearance formalities being performed at the seaport or the inland ports? | Check if there are any changes that come about as a result of the implementation of the new customs legislation | More than 16% of containers imported into the Port of Durban are not subjected to customs clearance at the port precinct. They are transported directly to City Deep, where customs formalities are performed. | All containers imported into the Port of Durban are subjected to customs clearance procedures at the port, before being transported to their destinations locally and the hinterland. |
| 8 What are the implications of the change in the number of days permitted to perform customs clearance | Check if the reduction of the number of days for customs clearance in the CCA has any effect on traffic | Close to 90% of all containerised cargo is cleared for customs within 3 days of arrival at the Port of Durban | The reduction of days for customs clearance to 3 days on its own will not result in added traffic on the roads |

| | | | |
|---|---|---|---|
| formalities? | congestion in the Port of Durban | | of the Port of Durban |

### 4.3 Discussion

#### 4.3.1 Container clearance

The Customs Control Act 31 of 2014 was enacted with a dual purpose to facilitate the flow of cargo imported to or intended for export from the South African borders and also to ensure the implementation of stringent risk management strategies with regards to cargo that enters the country's borders and thereafter is transported locally either on the roads or by rail. In line with the South African Revenue Services' Customs Modernisation programme, the Act makes provision for technology interventions in the clearance of international cargo. It complies with all the international conventions and trade instruments to which the country is a signatory. The Act also complies with recommendations that are constantly made by the World Trade Organisation and WCO (Goodger & Marais, 2013). Customs clearance entails presentation of certain contractual and duty documentation to customs authorities. The CCA in section 90(1)(a) moves forward the place and time where the obligation to submit customs clearance must be complied with, that is, at the sea port. This change increases the possibility of logistical delays related to customs formalities. These can include the delay in the processing of container documentation or delays caused by inspection, verification and detention of the container before arrival at the point of delivery.

#### 4.3.2 Manifest

Section 90(1)(a) of the CCA clearly states that goods must be entered or cleared for customs at the first port of entry into the country. Containerised cargo will no longer be allowed to move from a sea port, for example Durban, under cover of the manifest to an inland port. This provision is fundamentally opposite to that of the CEA in section 18(1)(d), which allows for the manifest as a document of entry for containerised cargo in bond that is destined for inland ports, for example, City Deep in Johannesburg. Industry players like importers of containerised goods will be legally obliged to provide a full customs declaration at the first sea port of arrival. This, in effect, means that container operators and importers no longer have the right to move imported containers in bond to an inland port within the country under

cover of the manifest as was permitted under the CEA. The view of SARS is that these changes will reduce illegitimate trade across South Africa's borders and will also ensure that dangerous cargo and materials are identified at the sea ports before finding their way inland. Hence, the customs declaration under the CCA for containerised cargo in section 90(1)(a) includes the customs trilogy requirement i.e true value of the goods and taxes that are payable; the origin of; and a clear description of the goods as per the Harmonised Commodity System (HS Code). The HS code will indicate whether the goods pose an economic or fiscal risk to society. The inclusion of the origin, HS Code and true value on the declaration would facilitate electronic data processing, which contributes to effective risk management and customs control.

### 4.3.3 Clearance days

Section 38(1)(a) of the CEA allows importers of containerised cargo a period of seven days after they have entered a port in the country to perform customs clearance functions. TPT as the container terminal operator where the containers are discharged before they are transported to their destinations offers importers three days free storage. Containers not collected at the expiry of this period incur storages charges as outlined in Table 4.2.

**Table 4. 2 Storage fees for import containers**

| **Number of Days** | **Tariff per Container Type (USD estimate)** | |
|---|---|---|
| | 6m/20' | 12m/40' |
| Day 1 – 3 | Free Storage Days | |
| Day 5 – 6 | R168.00 | R338.00 |
| Day 7 | R1095 | R2186 |

Source: TPT Tariff book (2018)

Containers that remain uncleared are moved to licenced depots around the EMA either by individual carriers or by TPT. The majority of containers are indeed collected within the three days of free storage. The only challenge faced by the terminal operator in this regard is that about half of the importers wait till the last free day to collect their containers. Port of Durban

shipping stakeholders acknowledge that the punitive storage fee after the last free day plays a crucial role in the number of days containerised cargo spends in the port (Kgare et al., 2011).

Section 90(1)(a) of the CCA reduces the permissible period to perform all customs clearance procedures for containerised cargo to three days of the arrival of cargo at a sea port. Although the period has been reduced by more than half as permitted under the CEA, three days is the de-facto period to collect containerised cargo from the Port of Durban. This change in the legislation will have no discernible effect to the cargo importers. The main issue of concern under this Act is increased penalties for storage of uncollected containers after they are moved to the state warehouse.

## 4.4 Cargo movement

The primary mode of transport for containerised cargo currently is road due to its advantages over rail. Apart from congestion of the roads, the increased number of heavy vehicles on the roads of the Port of Durban contributes to the deterioration of the road infrastructure. Some customers opt not to use cargo trains to the hinterland, but rather use road haulage. This translates to more road traffic in the Port of Durban. Gidado (2015) states that congestion in ports always results in the disruption of the logistics supply chain due to the delays, queuing and longer dwell time of ships (Gidado, 2015).

### 4.4.1 Back of port operations

The past decade has seen a steady growth of containerisation of internationally traded cargo in South African ports, with the majority of it handled in the Port of Durban. Back-of-port operations are integral in the movement of containers from the Port of Durban to their various destinations within the country and also neighbouring SADC countries. The majority of container warehousing and distribution sites are situated approximately 30 kilometres from the port (Sessions, 2016). Deconsolidation depots are important facilities in the container movement value chain as the majority of containers are stored and handled in them after being imported and again before they are exported through the port. They have a direct road transportation link with both Pier 1 and DCT from the depots and back.

In 2018 a total of 1 139 829 containers were imported into the Port of Durban. Of those, only 189 821 were loaded in bond onto rail trucks bound for the country's hinterland. The balance of 294 900 were transported by road out of the port. Not all these containers are transported straight from the port to inland ports or customers in Gauteng. A total of 227 965 were first transported to the various container stripping companies around the Durban area for consolidation. This means that more than 70% of the road cargo does not leave the EMA immediately after removal from the port area. These containers are again transported first to the "empty" container depots and later back into the port by road.

This multi-handling of containerised cargo from the port leads to increased volume of road traffic in the industrial parks and even suburbs around the port precincts. Delays at the container terminals due to various reasons, often lead to the total blockage of both incoming lanes of Bayhead Road, right up to its intersection with South Coast Road.

Under the CCA the 17% of the containerised cargo that is transported directly by bonded trains to City Deep after landing in the Port of Durban will now be discharged at the container terminal for customs clearance formalities before being transported either to the de-stuffing depots around the EMA or be transported to their destinations. The cargo that is not loaded into trains to City Deep after completion of customs clearance procedures will be transported out of container terminals by road. More trucks will be required to collect the containers and deliver them to customers, further contributing to road congestion.

### 4.4.2 Port access roads

When compared with rail transportation, road transport is the preferred mode of transportation in South Africa. This is also true of the containerised cargo imported and exported from the country. Among the reasons for this is the cost-effectiveness of the road transport, but the main reason for the reluctance to use rail is its poor state of repair, riskiness and delays in the movement of cargo. Unscheduled stops en route to Gauteng due to breakdowns or poor maintenance issues in the rail network have in some instances resulted in cargo theft. Over the years the freight train service has also been characterised by frequent delays and cancellations on short notice. These frustrations resulted in cargo owners making a switch from the rail to road haulage, particularly when timing of arrivals were critical or when transporting goods of high value. The road freight sector offers operators competitive rates on the cargo hauled on the main corridors in the country

In Durban the majority of container trucks enter the port from its southern end in Bayhead Road. This 6km long road terminates at the Pier 1 container terminal. At its middle it branches out leftwards into Langeberg Road in Bayhead area to the DCT. Maydon Wharf Road and South Coast Roads at the outer part also get congested as a result of entrance bottlenecks at the container terminals. To the south-west side of the port, container trucks block Umbilo Road at peak hours of traffic.

### 4.4.3 Role of inland ports

The CEA in s38(1)(d) has for the past fifty years of its existence allowed importers to move containerised cargo directly to inland ports upon arrival in the sea ports of the country under cover of a manifest. Containers destined for the hinterland are not stopped at the container terminals for customs clearance purposes and other declaration requirements. These formalities are performed at the inland ports as they have the same full customs clearance authority as their coastal counterparts.

Permitting containers to be discharged straight onto wharf-side bonded rail trucks for direct dispatch to, for example, City Deep inland port in Johannesburg, for which more than fifty percent of Durban's container arrivals are consigned, has assisted in reducing port congestion that chronically strangles one of the busiest ports in the continent. Apart from customers within the country, most neighbouring southern African countries' imported cargo enters through the Port of Durban.

The CCA prohibits the seamless inland port customs clearance by no longer allowing imported containerised cargo in the country to move directly from a sea port under cover of the manifest. SARS' position is that the description of cargo carried by a vessel as reflected on the manifest is of too general a nature. Due to modern international trading conditions they want a full description of cargo from the importer. With customs clearance functions removed from them, the country's inland ports will be downgraded to mere cargo depots.

## 4.5 Conclusion

This chapter presented the findings of the research that was guided by the stated research questions and objectives in Chapter one. The findings reveal that the transition in the customs legislation in South Africa from the Customs Control Act 91 of 1964 to the Customs Control

Act 31 of 2014 has fundamental implications in the customs clearance procedures for internationally traded containerised cargo entering or leaving the country's borders.

The freight rail network in the country still plays a significant role in the transportation of imported containerised cargo from the Port of Durban to the country's inland ports. However, a significant number of containers are transported on the country's road network from the Port of Durban to the local destinations like the licenced container depots and de-stuffing warehouses as well as the inland depots in the Gauteng province.

Under the former Act, cargo owners were allowed seven days to conduct customs clearance formalities for imported cargo. The new Act has drastically reduced the number of days for customs clearance procedures to only three days. Despite this change in the number of days, not much is expected to change since even at present most importers complete customs clearance formalities within three days of the containers being imported into the Port of Durban.

The other major change brought about by the Customs Control Act 31 of 2014 is to prohibit the use of a cargo manifest to allow cargo imported at the sea ports to proceed to the country's inland ports without any customs formalities being conducted. The requirement of this Act to conduct customs clearance formalities only at the sea ports has major implications for the transportation value chain when imported cargo at the sea ports has to be transported from the sea ports to the various destinations within the city as well the country's hinterland where the majority of containers cargo is destined. These inland ports currently play a povital role in easing the congestion in the roads in the port as containers destined to City Deep are tranported there directly without having to be subjected for customs clearance formalities at the Port of Durban. An unintended consequence of these changes could be reduction of the City Deep inland port to a mere container depot.

The next chapter will discuss in detail the recommendations to improve the constantly increasing traffic congestion experienced in the roads in the Port of Durban.

# CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

## 5.1 Introduction

This chapter provides conclusions and recommendations of the study. It will provide conclusive summaries based on each stated objectives. The recommendation section will table possible interventions based on the findings.

## 5.2 Study objectives

The main objective of the study was to examine the impact of the implementation of the Customs Control Act 31 of 2014 in the clearance of containerised cargo in the Port of Durban. The literature explored the legislative framework of customs clearance in South Africa. In this study, the Customs and Excise Act 91 of 1964 and the Customs Control Act 31 of 2014 were analysed in regard to their respective provisions for customs clearance requirements for containerised cargo. It provided the basic knowledge and understanding required to explain and discuss the findings in line with relevant international literature.

### 5.2.1 OBJECTIVE ONE: To examine the impact of the implementation of the Customs Clearance Act 31 of 2014 in the clearance of containerised cargo in the Port of Durban.

The study identified that the difference between the Customs and Excise Act 91 of 1964 and the Customs Control Act 31 of 2014 in respect of the clearance of containerised cargo imported into South Africa is the number of days allowed to cargo owners to complete customs clearance formalities. Section 38(1)(a) of the Customs and Excise Act permits importers of containerised cargo seven days of the date of entry of cargo into the country's sea port or inland port to complete customs clearance activities. The Customs Control Act 31 of 2014 reduces the number of days to complete customs clearance formalities. In section 90(1)(a) it states that cargo owners must submit customs clearance documentation within three days of arrival of containerised cargo at the port of entry.

The second difference between the Acts is the point of clearance. Section 38(1)(b) of the CEA allows cargo owners to make due entry of imported containerised cargo at any sea port

of the country as well as at any inland port in the country. Containers imported into the Port of Durban can be transported directly onto a bonded train under cover of the manifest to an inland port, for example, City Deep in Johannesburg where customs clearance formalities are performed. The Customs Control Act 31 of 2014 in section 90(1)(a) requires that all customs clearance activities are performed at the sea port where goods are discharged from a vessel.

### 5.2.2 OBJECTIVE TWO: To investigate the container distribution patterns from the Port of Durban to local, regional and hinterland destinations.

The study found that, even under the provisions of the Customs and Excise Act 91 of 1964, which permits containerised cargo that is destined to the country's hinterland to be transported by bonded train without being offloaded to the roads in the Port of Durban, the majority of the containers are moved from the port by road trucks. The main roads in the port precinct are regularly congested for many hours and thus lead to road blockages to private users as well. What exacerbates the situation even more is the tendency to use cargo consolidating warehouses that are situated within a short distance from the port. Containers discharged from the port are first transported by road trucks to these warehouses where the cargo is off-loaded and then consolidated according to same destination or same customers. It is then re-packed into relevant containers and then transported back into the port terminal. Cargo owners then collect them by haulage trucks from the port to their final destination. Approximately 17% of the containers destined for Gauteng are transported by rail trains, thus removing them from the roads of the port and the province. With the Customs Control Act 31 of 2014 requiring all containerised cargo to be discharged at the port for customs clearance, the traffic congestion is expected to be worsened as some of those imported containers will not be loaded into rail trains to the hinterland destinations.

### 5.2.3 OBJECTIVE THREE: To understand the role played by the inland container terminals in easing traffic congestion in the Port of Durban.

The findings from the literature indicate that approximately 17% of containerised cargo imported through the Port of Durban does not travel in the roads of the port to its various destinations. These containers are loaded onto bonded trains at the rail sidings in the Port of Durban and transported straight to City Deep in Johannesburg. Section 38(1)(d) of the Customs and Excise Act 91 of 1964 recognises the country's inland ports as places of entry

of imported containers. The vessel's cargo manifest authorises imported containers to travel directly to the hinterland destinations without having been customs cleared at the sea port. Containers arriving at the inland ports, like City Deep, by bonded train are off-loaded at the terminal and only then customs clearance procedures are conducted.

Section 90(1)(a) of the Customs Control Act 31 of 2014 requires that customs clearance procedures are performed at the sea ports, like Durban. This means that the authority of the manifest terminates at the sea port. Some containers discharged at the port terminal for customs clearance formalities might be transported by road trucks through the roads of the port to their various destinations. This would add to the traffic congestion in the roads of the Port of Durban.

### 5.3 Recommendations

5.3.1 There are important considerations to be undertaken by the Port of Durban and industry players in addressing potentially escalating levels of traffic congestion in the port precinct as a result of the implementation of the Customs Control Act 31 of 2014. These role players include a number of operating divisions of Transnet, the National Department of Transport (DoT), Ethekwini Metro, South African Police Services (SAPS), container depots, trucking companies and their associations. Within Transnet the relevant divisions are the TNPA, which is the landlord of the port, TPT which is the container cargo operation division and TFR which is responsible for rail infrastructure and also operates goods trains. Nominated representatives from these stakeholders should form a steering committee to identify the root causes of the container congestion in the port precinct and its surrounding industrial areas and work on developing long term solutions. Scheduled meetings, preferably led by TPT representatives should be held to discuss the status quo of the traffic in the port and its surrounding areas and the contribution each of the stakeholders will make to alleviate it. The Ethekwini Metro should conduct a traffic study specifically of the roads in the southern end of the port, starting with Maydon and South Coast Roads on the outer periphery to Bayhead and Langeberg Roads inside the port precinct. This study will reveal the nodes of congestion, for example specific road intersections and the time distribution of road blockages. Adjustment to the timing of traffic signals could be made where necessary to allow for improved traffic flow. In some busier intersections, like the corner of South Coast and Bayhead Roads, traffic police should be placed on stand-by during peak hours to direct the

traffic. Their presence would be of benefit in case break downs of trucks and accidents on these roads.

TPT should also evaluate their container operations systems and equipment since they contribute to the speed and efficiency of discharging containers from the sea vessels as well as loading them onto road trucks for transportation out of the terminals. Trucking companies should commit to not waiting for the last day of free stay of containers at the DCT before they dispatch their trucks to collect them. They should endeavour to commence collecting containers from the first day they have been off-loaded from the ship and they have been placed on stacks within the terminals.

5.3.2 The port is built on the land under the jurisdiction of the Ethekwini Municipality but is under the direct control of the TNPA which is responsible for the provision of the infrastructure and the marine services in the port. The main roads in the port are controlled and maintained by the Ethekwini Metro Roads Department. During peak hours, Bayhead Road which is a two-lane bi-directional road running through the port is often very congested with container trucks heading to the DCT. Private vehicles travelling on this road invariably find themselves forced to drive in the emergency lane as they attempt to get past the queuing trucks. There is a need to upgrade Bayhead and Langeberg roads into three lane bi-directional roads to mitigate the congestion problems encountered on them. The third lane should be demarcated for use by private vehicles only.

5.3.3 TPT should implement an advance container booking system for users to ensure that trucks only arrive at the port after being allocated a time-slot. This system should advise cargo owners, container forwarding agents and trucking companies of the containers that have been discharged from a sea vessel and are available for removal. A transporter should book with the DCT in advance if they intend to dispatch their truck to collect a container. A permit must then be affixed onto the windscreen of a truck with a reference number after permission has been granted to collect containers. The SAPS and the Ethekwini Metro police department should constantly patrol Bayhead, South Coast and Langeberg Roads, checking booking permits and preventing unauthorised trucks from entering these main roads and ultimately the gates of the container terminals. Developing a computer application (app) that forms a live communication platform for the container movement logistics value chain would also be beneficial in alleviating congestion in the port. Cargo owners, freight clearing agents, trucking companies and all the terminal operators in the Durban port precinct should be

constantly updated about the road congestion situation as well as the state inside the gates and operations within the terminals.

On this computer application, TPT will share information on the actual position of each container when the ship carrying it is in the waters of the Port of Durban. From outer anchorage, a few nautical miles from the port, to the actual berth where the container is discharged, the cargo owners and clearing agents would be aware of its location. Trucking companies will be informed in time to prepare for the collection of containers at the earliest possible time. Should there be any delay in the container movement within the terminals, for example, due to technical problems or labour issues, this information would be available to all stakeholders. TPT would then advise on when normal operations could be expected to resume. This information will be beneficial in the timeous collection of containers from the DCT as containers will be containers will be collected as close as possible to the time they have been discharged from the vessel.

The Ethekwini Metro should have live coverage of all the roads of all the roads in the port displayed on the app. If there is congestion in the roads within the port precinct due to any reason, trucking companies would be aware of this and would then be able to delay dispatching their trucks to the DCT until the blockage has eased off. This will avoid the current situation where trucks heading to the port stand in long queues from the gates of the container terminal all the way back into the surrounding suburbs, like Umbilo, Bluff as well as the M7 (Solomon Mahlangu Drive).

5.3.4 Available container space is limited. Improving logistics performance of the DCT is of utmost importance in addressing congestion from the point of its origin. The number of containers handled in the port increases each year. The port handled more than 2.9 million TEUs in 2019 and this number can be expected to escalate in years to come. It therefore becomes imperative that the operations systems and methods used are updated continuously to adapt to the changes in the logistics environment. The DCT operates seven days a week and 24 hours a day. Most container depots and cargo de-stuffing warehouses work office hours. This inevitably leads to disproportionally higher traffic levels during the day hours when compared to night time. On certain days the traffic is backed up from the gates of the terminals along Langeberg and Bayhead Roads for many hours, whereas on other days the roads and gates experience acceptable traffic loads. Private stakeholders should be encouraged to align their operating hours with those of the container terminals. Containers

would be moved to and from the various warehouses during the day and night and thereby decreasing daytime traffic.

5.3.5 Less than 20% percent of containers discharged at the Port of Durban are transported by rail to City Deep in Johannesburg, where the majority of imported containers into the country are destined to end up. TFR should consider increasing capital investment in its rail infrastructure network across its main corridors, including the Natcor line. More rolling stock, mainly modern locomotives and container wagons should be made available. This would ensure service reliability as the incidences of breakdowns and delays of trains while travelling to the country's hinterland would be significantly reduced. Safety measurements for cargo while in transit should be improved to improve customer confidence. Tariff rates for long distance haulage should be competitive compared with road trucks haulage rates.

The main advantage of road transport over rail transport is its ability to deliver a container directly to the premises of the customer. It is virtually impossible to have a railway line linked to every delivery point. Collaborative efforts between TFR and the trucking companies through their associations on rail and road interface strategies would assist in shifting the balance in the number of containers by each mode of transport. The majority of containers destined for the long distance along the existing rail network should be transported from the port to the nearest train station. Road trucks would then pick up the containers from the station and take them directly to the customers' premises. In this way a sizeable number of trucks would be removed from the roads within the port's precincts and along the province's highways.

**5.4 Limitations of the study**

The port environment is dynamic in its nature as it is a meeting point of various international trading partners and stakeholders. Although the results of the study provide some insight on the subject investigated, there are a number of other issues which may contribute to the congestion in the Port of Durban precinct. Being a general port, Durban also handles various other types of cargo like bulk petroleum, breakbulk and fresh produce which are also transported on the roads. The literature conducted to reach the conclusions of the study may not have been comprehensive enough to cover all the possible causes of traffic congestion as the focus was mainly on containerised cargo.

## 5.5 Suggestions for further research

For many decades, traffic congestion has been a constant challenge for the users of the Port of Durban as well as the public travelling on its roads. In all those years, the Customs and Excise Act 91 of 1964 was the legislation under which customs clearance for containerised cargo was performed. The Customs Control Act 31 of 2014 has replaced that legislation and has fundamentally changed the customs clearance formalities, the most important one being the termination of the manifest at the coastal ports. To a great degree, allowing imported containerised cargo to travel from the Port of Durban without having to stop it for customs inspections has played a beneficial role in reducing the number of container trucks on the roads in the port precinct.

Researchers could gather data from the various stakeholders who are actively involved in the import and export of containers from the Port of Durban and obtain their suggestions on how the traffic congestion can be addressed, taking into consideration the current legislative requirements for customs clearance. Transnet, as the landlord and container operator in partnership with SARS should explore the development of a computer application that integrates the functionalities of the various stakeholders in the customs clearance and transportation of containers from its ports. Further investigations should also be conducted on the role that will be played by the City Deep inland port in the easing of traffic congestion in the Port of Durban, especially given the fact the customs clearance functions have been removed from it under the CCA.

## 5.6 Conclusion

From the literature conducted and the document analysis of the two Acts, it can be concluded that the objectives of this study have been met. It has been shown that the legislative changes in the customs legislation in South Africa brings with it major changes in the customs clearance arena for both import and export of containerised cargo in its sea ports. The port environment is very unique. The movement of cargo to various destinations is not always linear. Imported containers are often initially transported out of the port by road trucks to the de-stuffing and cargo consolidating depots situated a few kilometres from the port. After being re-packaged they are brought back into the container terminals by road where they are loaded onto the road trucks for transportation to their final destinations. This means that the same container travels on the roads in the port a number of times before being finally

transported to the customer's premises. The designation of inland ports in the country as places of entry for customs clearance purposes under the Customs and Excise Act 91 of 1964 has been playing a significant role in reducing road traffic in the Port of Durban. The Customs Control Act 31 of 2014 is a comprehensive piece of legislation and fully complies with all international instruments and conventions of trade to which the Republic of South Africa is a signatory as well as the recommendations of the WCO. However, its requirement for container cargo owners to carry out customs formalities at the first seaport rather than at an inland port brings with it significant changes in the traffic patterns in the Port of Durban. Removing customs clearance authority from the country's inland ports downgrades them from their current status of being a place of entry of imported cargo to ordinary container depots.

This study was only conducted at one port out of the eight cargo ports in the country and as such the findings and recommendations cannot be fully generalised to the other ports. The Port of Durban is a much bigger and busier port and handles other types of cargo that are not exported or imported from the other ports. Having said that, the findings are in accordance with the literature, hence the recommendations can be implemented for this port.

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## Appendix A: Ethical Clearence Certificate

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

21 January 2021

Mr Maxwell Nhlanhla Khuzwayo (212562229)
School Of Acc Economics&Fin
Howard College

Dear Mr Maxwell Nhlanhla Khuzwayo,

**Protocol reference number:** 00005928
**Project title:** Exploring the implementation of the new customs act on the road congestion in the Port of Durban

### Exemption from Ethics Review

In response to your application received on 16 January 2021, your school has indicated that the protocol has been granted **EXEMPTION FROM ETHICS REVIEW.**

Any alteration/s to the exempted research protocol, e.g., Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through an amendment/modification prior to its implementation. The original exemption number must be cited.

For any changes that could result in potential risk, an ethics application including the proposed amendments must be submitted to the relevant UKZN Research Ethics Committee. The original exemption number must be cited.

In case you have further queries, please quote the above reference number.

**PLEASE NOTE:**
Research data should be securely stored in the discipline/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours sincerely,

[redacted]

**Prof Jocue Mbonigaba**
**Academic Leader Research**
**School Of Acc Economics&Fin**

**Appendix B: Turnitin Report**

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