Introducing Digital Bill of Lading in Foreign Trade: Empirical Assessment of the Practical Need in Ethiopia

Israel Woldekidan Haileyesus *

Abstract

Paper bill of lading has passed through different stages of development depending on the function it performed. Form wise, it has been used in forms of paper bill of lading until recent time. However, due to the advent of technology and the inherent problems associated with being used in forms of paper results the introduction of dematerialized bill of lading in the international commercial transaction. This article aimed to investigate the need for introducing electronic bill of lading in Ethiopia. To address the issue the paper employed socio-legal research methodology to look into whether there are factors that necessitate introduction of electronic bill of lading in Ethiopia or not and showed that there are actual demanding factors for introducing it in the Ethiopia foreign trade regime.

Key Words: Technological Readiness, Late Arrival, Loss, Error, Documentary Fraud, Trade flow, Electronic Bill of Lading

1. Introduction

While goods are transacted across the border under the international commercial transaction, it is must to have an exchange of documents as between the concerned parties ranging from the government entities to the traders themselves. Among those documents, transport document lies at the soul of the international commercial transaction. These include documents issued by the shipping line, freight forwards, airlines or other transport carriers. From all transport documents bill of lading is one of the most important and widely used documents in the shipping industry (Georgios, 2008).

Traditionally these business processes are conducted using paper documents. However, advances in the information technology, electronic communication and processing has an impact on the overall international commercial transaction. As a result, the efficiency of paper

* LL.B (Bahir Dar University), LL.M in Business and Corporate Law (Bahir Dar University), Lecturer of Law, School of Law, Samara University. The author can be reached at: israkidan@gmail.com.
as methods of communication across commercial transaction is questioned and subject to replacement by the electronic counterpart. The use of information technology to share information between organizations started since the 1970s (Merrill, 2002). Information technology was used by businesses to transfer information to their customers or suppliers mostly through value-added networks (Merrill, 2002). Later on standard protocols were developed to computerize the exchange of electronic documents relating to purchasing, selling, shipping, receiving, and inventory, financial and other activities (Merrill, 2002). The efficiency of EDI methods has thus changed the vein of international commercial transaction over the last decades. The development of electronic commerce and electronic data interchange affected the shipping industry (Merrill, 2002). At the international level among the documents used to perform international trade, it is bill of lading which caught the attention of the shipping, financial and other concerned organs; when the issue of digitalization is raised.

The development of bill of lading has passed through evolutionary periods; as usual the late 1990’s also gave another stage of development for this unique document of international commercial transaction that is having an electronic form. For instance, in case of usage of straight bill of lading the so-called Cargo Key Receipt was developed (Merrill, 2002). Since then the shipping business community has tried their own best for the introduction of electronic bill of lading. Accordingly, through private initiatives electronic bill of lading was introduced in the international trade. Among others, SeaDocs, Bolero CMI The CargoDocs EBl, The @Global Trade System, The Trade Card System and the Korean Trade Network and the Block chain Bill of lading are mentionable. Since the start of this century, electronic bill of lading is flourishing. This is because the technological, commercial and legal problems got recognition. Among others, the following factors influenced such result. Electronic bill of lading is recognized by Baltic and International Maritime Council; which is the world’s largest international shipping association, with more than 2,200 members globally. Besides, the International Group of Protection and Indemnity Insurance Clubs’ approved electronic bill of lading as one transport document. Moreover, the invention of Block chain technology addressed the very problem of the existing technology that is using central registry system.
Coming to the case of Ethiopia, Ethiopia has been participating in the international trade as of 3000 years ago. During the Axum civilization, Ethiopia was an active participant of the international trade and it was also among the leading shipping nations. Afterwards, through passage of time, it’s involvement in the international trade was not as such active for different reasons. Currently, despite the fact that Ethiopia is a landlocked country, our import and export trade is getting increased from time to time. Ethiopia is also acceding to the world trade organization which in effect catalyze our international trade. Its share of inter-regional trade with other African countries, the Middle East and Asia is also increasing. Moreover, modernization efforts are started by the concerned institutions like automation of service and using modern technologies in the custom or transport sector. ERCA since 1998 has automated most of its foreign trade procedures carried out both at the head office and branch offices level; which in effect has accelerated customs clearance and simplified procedures through computerization.

Ethiopia has also automated the examination of import-export cargo. It is also working to upgrade the ASYCUDA++ to the ASYCUDA World system. Besides, the Ethiopian Revenues and Customs Authority and the Investment Climate Facility for Africa signed an Agreement worth US$ 7.3 million to establish an electronic Single Window system for international trade which would have paramount importance to bring all concerned organs to a single electronic environment. Most importantly, on March 10, 2017 Ethiopia and South Korea signed a 13-million US- Dollar deal for the installation of electronic customs clearance system. Electronic Cargo Tracking system is the other modern system which ERCA is working to have in the near future. The Ministry of Transport is also working to have National Fleet Logistics Information Management System (NFLIMS), the Logistics Information Management System (LIMS). These modernization efforts by the government show us that, there is a tendency to move towards creating paperless foreign trade environment. Ethiopia is so far using paper bill of lading though there are actual tendencies towards digitalizing it. However, despite the tendency towards having it, nothing is scientifically studied as to whether there is an actual need to digitalize bill of lading or not? Accordingly, this paper explored whether there is a need for introduction of electronic bill of lading in Ethiopia or not.
Methodologically, the writer used both doctrinal and empirical methods. By employing the doctrinal one, the author analyzed the existing domestic and international legislations, soft laws and scholarly writings. Empirical type was mainly employed to look into whether there are actual necessitating factors for the introduction of electronic bill of lading in Ethiopia. This article is organized in two four sections. The first section of this article briefly explores transport documents used in Ethiopia foreign trade system. Under part two the paper reviews whether there are factors that necessitate introduction of electronic bill of lading in Ethiopia or not, and it discuss those factors in detail. Section three is devoted to examine the technological readiness of Ethiopia for introduction of electronic bill of lading. Finally, under section four the writer provided conclusion.

2. Transport Documents Used in Ethiopia Foreign Trade Regime

Principally, importation and exportation of goods to and from Ethiopia can be conducted through the involvement of major modes of transportation system. It may be conduct either through marine, rail, air or road transportation. To do so, the respective transport document of every transportation method can be employed. The writer is intended to identify two interrelated issues. The first one is to identify as to which marine transport documents ‘(bill of lading, sea waybill, electronic bill of lading or other else) are employed under marine and multimodal transport system. The second one is about the nature of the transport document under usage (negotiable or non- negotiable) and the reason for their choice.

To do so, five relevant government and business entities are interviewed and their response is provided as follows. Nigussie (2018) stated that the type of marine transport document that they have been using is different in case of export and import. In case of importation, almost in all case, they use paper bill of lading as the Ethiopia law does not allow to use other transport documents including sea waybill. However, in case of exportation, unless payment is made in documentary credit, they often use sea waybill. Nigussie (2018) also told me that sometimes from those countries which do not know what is required under Ethiopia law; mostly from the United States of America, sea waybill or telex release may be issued and sent to them for clearing purpose. However, according to Nigussie (2018), in case when such types of cases happened what they commonly do is either to request an original bill of lading from the shipper or to issue an original bill of lading by themselves as an agent after surrendering the sea
waybill. The other respondent from the Ethiopian Shipping and Logistics Services Enterprise, Yared (2018) stated that the enterprise employs two types of transport document depending on the mode of transport employed. According to him, in case of multimodal transport system combined/thorough bill of lading is used; whereas in case of unimodal transport system, normal bill of lading is in use. Besides, he also stated that in terms of negotiability depending on the order of the shipper both negotiable and non-negotiable bill of lading are in usage though negotiable bill of lading is the most widely used one. He also informed the author that so far there is no practice of electronic bill of lading. The remaining three respondents also provided that; what is practically in use is only paper bill of lading and multimodal transport document (Assaminew, 2018; Samson, 2018 and Yordanos, 2018).

Coming to the nature of bill of lading they employed and the reason behind their choice, all of the respondents told me that, it is negotiable bill of lading and negotiable multimodal transport document which is practically in use. They elaborated the reason behind its negotiability as follows. According to them, negotiable bill of lading is mainly employed by the fact that commercial and legal factors necessitates doing so. To start with the commercial factor, in Ethiopia especially in case of import transaction, it is almost must to have the involvement of banks. As a result, when banks are there, the transaction is going to be made through documentary credit system; which among others require the negotiability of the transport document to be used.

Besides, they also stated that under the Ethiopia customs law unless there is guaranty form the bank or insurance company, it is not allowed to release cargo from the port by copy documents. Moreover, Nigussie (2018) provides that the Ethiopia maritime law obliges the carrier to release cargoes after having the original bill only. Thus, due to these factors, it is negotiable bill of lading or multimodal transport document that can address all the above commercial and legal necessities. These responses of the participants of the study show that the marine transport document which is practically under usage is negotiable bill of lading.

3. Factors that Necessities Introduction of Electronic Bill of Lading in Ethiopia
Under this part, the author addresses the issue related with whether there is an actual need for the introduction of electronic bill of lading in Ethiopia or not. In doing so, the author used both an interview and document analysis. In total, 9 organizations which include both government and business communities are interviewed. Besides, documentary data and reports are also examined and analyzed. The participants of the survey are personnel from Ethiopian Shipping and Logistics Services Enterprise, Ethiopian Maritime Affairs Authority, Ethiopia Customs and Revenue Authority, Ethiopia Single Window Development Project Office, Commercial Bank of Ethiopia, Ethiopian Petroleum Supply Enterprise, Freighters International (PABOMI), Solomon Zewdu International Shipping and Freight Forwarders Agent and MACCFA Fright Logistics. The interview collected form those respondents and other data and reports are examined and analyzed in order to appreciate whether there is the actual need for the introduction of electronic bill of lading in Ethiopia or not and it is summarized as follows.

3.1. Late Arrival of Paper Bill of Lading Which Results in Unnecessary Cost Due to Delay of Cargo Clearance

It is no doubt that the status of logistics and transport sector is the major determining factor for having proper performance in the international commercial transaction. Unless a given state has built efficient logistics and transportation system, it would be very difficult to be competitive enough at the arena of international trade and even it is one of the very important worries of investors to invest or not to invest in that state. The status of Ethiopia in this regard is not good.

The World Bank Group annually come up with a report on the logistics performance of states. According to the 2016 World Bank report; Ethiopia’s ranking is 126 out of 160 countries surveyed (Logistics Performance Index, 2016). The World Bank’s LPI analyzes countries in six components: these are the efficiency of customs and border management clearance, the quality of trade and transport infrastructure, ease of arranging competitively priced shipments, competence and quality of logistics services, ability to track and trace consignments and frequency with which shipments reach consignees within scheduled or expected delivery times (Logistics Performance Index, 2016). Accordingly, Ethiopia ranked as 80, 133, 102, 117, 133 and 149 respectively (Logistics Performance Index, 2016). This tells us that Ethiopia’s performance on the frequency with which shipments reach consignees within scheduled or expected delivery times is the worst of all yet the very important logistic performance indicator.
Secondly, according to the 2013 OECD trade facilitation indicator report, “Ethiopia’s performance for the harmonization and simplification of documents, automation and streamlining of procedures is below the averages of Sub-Saharan African and lower income countries” (OECD Trade Facilitation Indicators of Ethiopia, 2013). The above two reports tell us that there is chronic trade facilitation problem which can be attributed either due to backward infrastructure or poor documentation process which ranges from bank permit process to goods release process. Though there is improvement in terms of infrastructure, still the problem is prevalent as the second problem is not yet addressed.

As per Ethiopian Revenues and Customs Authority baseline survey for time release, the average time for bank permit process and port clearance process to handover to the importer by clearing agents/forwarders including transport from Djibouti to Addis Ababa on average was found to be 32 and 33 days respectively (OECD Trade Facilitation Indicators of Ethiopia, 2013). The same study also shows that the goods transit time from three ports particularly from India, China and Dubai ports on average was only 12 days (OECD Trade Facilitation Indicators of Ethiopia, 2013). Besides, as per the report the average Ethiopian goods port dwell time at port of Djibouti is 31 days; which is the average of 30 days for unimodal transport through freight forwarders, 54 days for unimodal through the Ethiopian Shipping and Logistics Services Enterprise and 10 days for the multimodal transportation of goods (OECD Trade Facilitation Indicators of Ethiopia, 2013). Furthermore, as per the 2016/17 Ethiopian Shipping and Logistics Services Enterprise Annual Report, the average Ethiopian goods port dwell time at port of Djibouti was 33 days for unimodal cargoes and 9.5 days for multimodal cargoes.

Participants of this study reported that the basic problems they encountered while they were using paper bill of lading. All of the respondents including both government institution and the private business communities stated that in most cases cargoes arrived at port of Djibouti before bill of lading reaches to the hand of importers or freight forwarders (Assaminew, 2018; Samson, 2018 and Temesgen, 2018). Consequently, by the fact that original paper bill of lading is required for making delivery, custom clearance and bank permit process, cargoes may not be cleared on time.

According to the statement of the respondents because of the reason cargoes are not cleared on time the overall player of the transaction will suffer costs (Assaminew, 2018; Samson, 2018
and Temesgen, 2018). First, the importer incurs unnecessary and additional costs like demurrage and storage costs, which would not be there had the documents been in the hand of the importer while or before the cargo arrived at Djibouti port (Assaminew, 2018; Samson, 2018 and Temesgen, 2018). Besides, because of the competitive nature of the market; the price of a given product which has to be at the market before a month may not have a similar price after a month. Thus, the importer suffers to unexpected and market-oriented price competitiveness which cannot be averted otherwise (Assaminew, 2018; Samson, 2018 and Temesgen, 2018). Second, unless the importer gets bankrupt because of market competition; it is consumers who finally suffer from an increase on the price of the goods imported through transfer of price to them, which would in effect has an adverse impact on the gross national economy of the country as there would be an increase of consumption cost (Assaminew, 2018; Samson, 2018 and Temesgen, 2018). According to the statement of the respondents and analysis of documents, the reasons for such late arrival of bill of lading can be attributed to either of the following reasons.

3.1.1. The Actual Foreign Trade Flow of Ethiopia and Nature of Imported Cargoes

As per the 2014/15, 2015/6 and 2016/17 Annual Report of National Bank of Ethiopia, the major sources of Ethiopia’s import merchandise is from Asia which accounts around 65 percent of the total imports (NBE, 205/16/17). In terms of states, 80% of the import merchandise originates from China, India, Kuwait, Saudi Arabia and the United Arab Emirates (NBE, 205/16/17). Similarly, though there is a difference in terms of share Ethiopia’s majority of export merchandise is destined to Asia which accounts for 37.7 of the total exports (NBE, 205/16/17). In terms of the states, nearly 67% of the Asian share is destined to China, Saudi Arabia, United Arab Emirates, Israel, India, Pakistan, and Yemen. Generally, the majority of Ethiopia foreign trade flow is towards the Middle East and South East Asian countries. So, what? One of the principal reason for the early arrival of bill of lading is related to the where about of the port of loading of cargoes. If the distance between the port of loading and the port of discharge is too short, it is obvious that the cargoes can arrive before the original paper bill of lading. Accordingly, the actual foreign trade flow of a given state determines the lateness or otherwise of the marine bill of lading and other transport documents.

As stated above the average transit time from ports of Dubai, India, and China is 12 days. Hence, unless the documents are there at the hand of the forwarders or importers before 12
days, it is obvious that the cargo cannot be cleared from the port. One of the respondents of the examination stated that the principal reason for the lateness of bill of lading in their transaction is the fact that around 85% of the bulk cargoes imported is from Kuwait (Asaminew, 2018). According to him, the transit time from Kuwait to the port of Djibouti is too short which may take only 2 or 3 days. Nevertheless, the document even may not be sent from the shipper while the good has arrived at Djibouti port as it takes more time than the transit time (Asaminew, 2018)). Even dry cargoes which are imported by Ethiopian Petroleum Supply Enterprise are originated either from the Middle East or South East Asia in which the transit time is still short and in effect, the cargoes arrive before the document reached the hand of the enterprise (Asaminew, 2018).

Coming to the nature of cargoes, the data obtained from the Ethiopian Maritime Affairs Authority tell us that most of the cargoes imported to Ethiopia for the past six years are bulk cargoes (dry bulk and tanker bulk) and general cargoes which are not containerized. As can be witnessed from the table below nearly 2/3 of the whole Cargoes imported to Ethiopia is bulk cargoes and non-containerized general cargoes.

Table: 1

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Grain</td>
<td>1,120,285</td>
<td>2,611,305</td>
<td>1,910,464</td>
<td>1,910,324</td>
<td>1,319,984.89</td>
<td>1,114,094.31</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Fuel (Oil &amp; gas)</td>
<td>3,900,000</td>
<td>3,378,455.00</td>
<td>3,138,693</td>
<td>2,906,874</td>
<td>2,575,056.00</td>
<td>2,300,000</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Fertilizer</td>
<td>917,721</td>
<td>844,534</td>
<td>691,036.60</td>
<td>858,696</td>
<td>573,565.00</td>
<td>971,301.765</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Coal</td>
<td>974,542</td>
<td>717,133.69</td>
<td>500,000</td>
<td>500,000</td>
<td>910,000.00</td>
<td>247,451</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Sugar</td>
<td>163,194</td>
<td>197,945.48</td>
<td>300,000</td>
<td>280,400</td>
<td>236,835.00</td>
<td>227,750</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Container Multimodal</td>
<td>2,422,824</td>
<td>2,383,796</td>
<td>1,805,582.25</td>
<td>1,267,768.36</td>
<td>695,099</td>
<td>1,030,677.00</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Container Unimodal</td>
<td>845,952</td>
<td>913,373</td>
<td>1,022,711.18</td>
<td>1,017,568.14</td>
<td>970,834</td>
<td>1,017,784.00</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Other general Cargo</td>
<td>1,831,276</td>
<td>2,773,608.55</td>
<td>2,964,070</td>
<td>2,530,188</td>
<td>2,167,010.57</td>
<td>2,379,338</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>12,175,793.75</td>
<td>13,820,152</td>
<td>12,332,557</td>
<td>11,271,819</td>
<td>9,448,384.46</td>
<td>9,288,396.08</td>
<td></td>
</tr>
</tbody>
</table>

Source: Taken from the Ethiopia Maritime Affairs Authority Report on Import Performance

In Ethiopia, bulk cargoes are imported through unimodal system mainly as it is difficult to containerize them, big blow. As stated before the Ethiopian goods port dwelling time at the port of Djibouti is highest in case of the unimodal system than the multimodal. Besides, as
discussed above Bulk cargoes by their nature are vulnerable for repeated negotiation during transit, as a result, there is no choice to use other types of transport document like sea waybill rather it is only negotiable bill of lading that fulfills this characteristic of bulk cargoes. However, in Ethiopia, as stated above the port dwelling time for bulk cargoes is above a month by the fact the paper bill of lading becomes late. Therefore, there should be means which can accommodate its nature with the existing problem; for this author, it would be true only by using digitalize negotiable bill of lading.

Therefore, as the foreign trade flow of Ethiopia is from and to middle east and south-east Asia countries in which the cargo transit time is too short and the nature of cargoes imported to Ethiopia are mainly bulk and non-containerized general cargoes which cannot be done through multimodal system, it is necessary to introduce electronic bill of lading in order to alleviate the costs incurred due to late arrival of traditional paper bill of lading.

3.1.2. The Nature of Ethiopia’s Foreign Trade Payment System

Globally, payment in international trade can be made in four major ways (Andres, 2008). The First method of payment is advance payment; it is a mode of payment in which the buyer obliged to pay before the transfer of ownership to him through telegraphic transfer or credit card system (Andres, 2008). It is among the fastest method of payment. However, unless there is trust between the buyer and seller through prior relationship, it is very risky for the buyer and not even advisable (Andres, 2008). Besides, this types of payment in most jurisdictions is not from the official foreign exchange market and there is also a quantity (Andres, 2008).

The second mode of payment is a documentary collection. It is one of the most important methods of payment in the international trade in which payment is to be made through the seller’s and buyer’s banks support by forwarding documents to the buyer against payment (Apexa and Khushpat, 2017). Here, the exporter after making shipment gives the documents to his bank and the seller’s bank will forward them to the buyer’s bank (Apexa and Khushpat, 2017). After that, the collecting bank releases the documents to the buyer if and only if payment for the goods are made by the buyer. Then after, the buyer’s bank will transmit the money to the seller’s bank for payment to the later one (Apexa and Khushpat, 2017). Under this mode of payment, bill of lading serves as security for the buyer’s bank to make the payment. Therefore, the buyer cannot take delivery of goods until he gets the bill of lading which is
under control of the bank as a documentary collection. The third and most widely used mode of payment is documentary credit (Letter of Credit). Letter of credit is the most secure method of payment under international trade and it is advisable if the buyer and seller are unfamiliar each other (David, 2016).

Letter of credit is a commitment by a bank on behalf of the buyer to make payment for the seller through the later bank up on fulfillment of certain conditions which are mostly related to presentation and confirmation of documents (Apexa and Khushpat, 2017). In this case, the buyer’s bank will release the documents after payment has been made by the buyer. Among the documents, negotiable bill of lading is used as a security to the bank by guarantying the bank for the obligation it has undertaken on behalf of the buyer (Apexa and Khushpat, 2017). However, under this mode of payment, issuance and amendments of documents can take time and it will have an impact on the clearing and delivery of cargoes. The fourth type of mode of payment is payment on consignment basis. Under this mode of payment, payment is made only after the cargo is sold or transferred to another buyer or wholesaler not while it is under the hand of the importer or broker. It is mostly used in case of perishable products (Welby, and Brian, 2004).

Generally, the most widely used modes of payment are payment through documentary credit and documentary collection. In doing so, for the banks, it is must to use negotiable bill of lading as security for effecting payment through documentary credit and documentary collection. The unique nature of bill of lading as a document of title has a paramount importance for financing import-export trade. The challenge is that financing of trade through documentary credit and documentation process increases the number of days for processing takeover of cargoes from ports. So, there should be a solution which can substitute the role of paper bill of lading as a document of title and which avoids problems related to the late arrival of cargoes. The practical solution as discussed before is digitalization of electronic bill of lading.

Coming to the case of Ethiopia, payment for import can be made either through letter of credit, cash against documents (documentary collection) and advance payment (NBE Directive to Transfer NBE’s Foreign Exchange Functions to Commercial Banks, 1998:5). Besides, payment for export can be made either on basis of letter of credit, cash against document (documentary collection), advance payment and consignment (NBE Directive to Transfer
NBE’s Foreign Exchange Functions to Commercial Banks, 1998:5). However, The Ethiopian foreign exchange law puts a restriction on the amount of transaction to be processed on the basis of advance payment. The amount to be permitted for advance payment shall not exceed USD 5,000 (NBE Directive to Transfer NBE’s Foreign Exchange Functions to Commercial Banks, 1998:5).

This shows that payment for all imports which worth more than USD 5,000 is required to be processed and paid either through documentary credit or cash against document in which bill of lading is one of the documents used to effect payment. Practically, as stated by Yared (2018), Legal, Insurance and Claims Department Director at Ethiopian Shipping and Logistics Services Enterprise, the reason behind the most prevalent usage of bill of lading is related to the requirement of the Ethiopia payment system law. He stated that “almost 98% of import-export transaction has to be conducted through documentary credit system; it is must to issue negotiable bill of lading” (Yared, 2018). According to him the possibility to use other non-negotiable transport documents like sea waybill is too minimal (Yared, 2018).

Moreover, Anteneh (2018) also stated that though it is not quantified most of the import trade payments processed by Commercial Bank of Ethiopia is made either through letter of credit or cash against document. To conclude, the role of bill of lading in documentary credit payment system has caused late arrival of the bill than the cargo. As a result, bill of lading has to be digitalized in order to avoid its setback on the cargo clearance and logistics performance of Ethiopia; but only without losing its function as a document of title.

3.2. Loss, Error and High Cost for Amendment of Paper Bill of Lading

Paper bill of lading as a document by its nature is vulnerable for being mistaken, lost, stolen or destroyed. The discrepancy may happen on the particulars of a bill of lading mostly on the description of goods. The discrepancy may be known at different stage of the documentary transaction, for instance the seller may know the existence of discrepancy of description of goods stated on bill of lading once after the bill has been released by the carrier or it may be known later on after the original bill of lading is submitted to the shipper’s bank or maybe after the bill reaches at the hand of the buyer (Al Azzawi, 1998).

For the first scenario of discrepancy, by the custom of mercantile, the error can be amended by submitting all originals for the freight forwarder at the port of loading who issued the bill of
lading instead of the carrier (Al Azzawi, 1998). In case of the later scenarios amendment of the description of goods can be made only after the buyer has received the discrepant bill form his bank. The buyer after receiving the bill will approach the carrier’s representative and by permission of the carrier or his representative from the port of loading, correction will be made (Al Azzawi, 1998). This amendment process will take time and this in effect increase the dwelling time of cargoes at the port of delivery which in turn increases cost of the shipment.

Bill of lading may also be stolen, destroyed or lost while it is at bank, courier transit or even before it is submitted to the bank (Al Azzawi, 1998). This cannot be avoided notwithstanding that the parties gave a due care on preservation of it. The problem is without having original bill of lading, it is not possible to make delivery of goods at the discharge port. What could be the solution? The answer is obvious it has to be substituted or replaced. Through mercantile custom, a lost, destroyed or stolen bill of lading can be substituted by another original set of bill of lading with the fulfillment of certain conditions particularly the shipper will be obliged to give indemnity bond which relieves the carrier from being liable if the lost bill of lading is found and surrendered (Al Azzawi, 1998). The shipper or his representative after approaching the carrier request for issuance of a set of original bill of lading instead of lost original bill of lading (Al Azzawi, 1998). This process of substitution will take additional time and it increases the time that actually takes for the banking process and overall clearance process since the shipment does not wait at the transit while the lost bill is substituted.

Regarding the case in Ethiopia, all of the respondents who participated in this study reported that loss or mistake on the particulars of bill of lading is a usual challenge they encountered. Mr. Samson Hailu, Operation Manager of Solomon Zewudu International Shipping and Freight Forwarding Agent, stated that product specification or other contents of bill of lading may miss match with the sales contract and also it is normal to find unrelated contents from the bill of lading. He described the problem as follows,

*The problem of inconsistency with the goods description leads to amendment of that particular Bill of lading: another big upset! Amendment of bill lading cause for the restarting of the document transaction process again which in effect increases the dwelling time and costs going to be incurred by the importer.*

“[Emphasis added]” (Samson, 2018).
Another respondent from MACCFA Fright Logistics stated that bill of lading may be lost either at custom or while it is in the hand of the shipper, freight forwarders or consignee, in such cases, there are no other means rather than requesting for issuance; which in effect takes additional weeks to have it again (Nigussie, 2018). In addition, an official from the Ethiopian Shipping and Logistics Services Enterprise disclosed that some of their customer request the enterprise to release the cargo by alleging that the original bill of lading is either destroyed or lost (Yared, 2018). Moreover, the official from the commercial bank of Ethiopia stated that CBE as importers bank witnessed the loss of bill of lading while facilitating documentary credit process (Anteneh, 2018). The above assessment shows that loss and discrepancy of bill of lading are actually happening here in Ethiopia likewise what is going on in another world.

3.3. Ethiopia’s Vulnerability for Documentary Fraud
As stated under the previous part, bill of lading is one of the most important documents in documentary credit system as it gives both title in the goods and all rights to sue under the contract of carriage to the transferee. Because of its role in facilitation of international trade, fraudsters are eager to get benefit through manipulation of it. Fraud on bill of lading can be made in different ways. The first scenario is the case in which no shipment of goods is made. These types of fraud can be made by using imaginary names for the carrier and ship but the carrying vessel named in the bill may not even exist (Susmitha, 2007).

The problem becomes worse by the fact that the banker will verify only the authentication of the document presented, not the actual existence of cargo. The second scenario of fraud on bill of lading can be committed by shipping lesser quantity of goods than actually contracted (Susmitha, 2007). Moreover, bill of lading can be forged by creating a fake set of bills of Lading that looks sufficiently genuine against which they seek to take delivery of the cargo in advance of the genuine importer or receiver (Cargo Frauds to Watch Out for, 2018). This type of fraud is mostly conducted with the help of insiders who has knowledge about the detail of that particular bill of lading. The fourth scenario in which bill of lading can be forge is through the insertion of a false date of shipment in the bill of lading by the shipper or his agent to show that the shipment has been made in time, but not actually. The problem is getting worse and worse with the help of technology as fraudsters manipulate the evil side of technological instruments to make fraud on the paper.
Studies show that developing countries are the main target of documentary fraudsters. In those countries, buyers and other concerned parties who involved in the process of the international business transaction lacks the required skill and knowledge to detect the forged one from the genuine. Thus, as Ethiopia is a developing country, it is presumed that she is under the target of fraudsters. Respondents of this study were asked about the status of fraud on the bill of lading in Ethiopia. Mr. Yared Shiferaw, Legal, Insurance and Claims Department Director at Ethiopian Shipping and Logistics Services Enterprise, believes that vulnerability of paper bill of lading for forgery is the major problem of a paper bill which necessitates the introduction of an electronic bill of lading in present Ethiopia. He also stated that in recent times, forging the bill of lading becomes the challenge of the overall maritime industry. Yared (2018), stated the seriousness of the problem as follows.

As a shipping line, we have experienced a lot of real cases relating to forgery of bill of lading. Some of the forged bills of lading can be easily identified at the early stage without having any impact on the transaction. But, sometimes it may be even very difficult to detect and differentiate forged bill of lading from the genuine one. As a result, there are cases in which the enterprise delivered cargoes against a forged bill of lading and in effect the shipping enterprise as carrier and other parties of the transaction incur costs. Today, everyone at our enterprise is careful on the genuineness of a given bill of lading and the enterprise always tries its own best to check the document.

For him, digitalization of electronic bill of lading is very important to avoid such big practical challenges of using a paper bill of lading. Mr. Melaku Mekonnen from the same department has also expounded as to how Ethiopian Shipping and Logistics Service Enterprise bill of lading is vulnerable to forgery. He stated that most traders in Ethiopia knows that the main purpose of a bill of lading is its function of being title deed. Knowing this, some evil-minded traders can forge the Ethiopian shipping line bill of lading if they have knowledge about the fact that the bill of lading is the one which is issued by the agent of Ethiopian shipping line at the port of loading and if they access some of the details of that specific bill of lading (Melaku, 2018). Besides he also added that the technological development makes everything easy to print out forged bill of lading as it is original (Melaku, 2018).

A recent case which is pending before the civil and criminal bench of Ethiopian and Korean courts shows the gravity of the problem. An importer whose name is Mr. X has entered into a contract of sale with a South Korean car dealer for the purchase of 22 automobiles which worth around 7,000, 000 Ethiopian Birr (Melaku, 2018). The Ethiopian Shipping and Logistics Service Enterprise through its agent has issued a bill of lading for the South Korean car dealer
at the port of loading there in South Korea (Melaku, 2018). However, another trader seated in Ethiopia who has not an actual contract with South Korean car dealer come up with a forged bill of lading as if he is a genuine receiver of the automobiles and delivery has been made for him. Later on, after delivery has been made for the fraudster, South Korean car dealer informed the Ethiopian shipping line that it has not yet sent the original bill of lading to Mr. x.

4. Technological Readiness of Ethiopia for Introduction of Electronic Bill of Lading

It is known that an electronic bill of lading can endure in practice just by using a certain technology. Even, the traditional paper bill of lading is realized by the technology of written word on paper. Accordingly, the technological readiness of a given state is very important in order to have an application of electronic bill of lading.

Emanuel T Laryea; a well-known scholars in the area of paperless international trade, has identified the minimum technological threshold that needed to operate paperless international trade (Emmanuel, 1999). According to him, the following minimum technological requirement has to be met by the principal players of international trade in order to have a paperless trade (Emmanuel, 1999). The first minimum threshold is that importers, exporters and their agents need to have “technology-hardware, software, and other accessories to install and maintain an electronic system at acceptable international standards” (Emmanuel, 1999). Besides, the system they have should enable them to create, transmit, receive, store, secure, and retrieve structured electronic data and able to be connected online.

Secondly, government agencies are also required to have the technology which supports electronic systems, mainly the government must have installed electronic clearance systems which can connect with importers, exporters, freight forwarders, brokers, and carriers. Third, banks and other financial institutions need to have the technology of communication system which can connect importers, exporters and other entities each other and to the international business community. Fourth, there must be basic national IT infrastructure, a regulatory framework for information technology. The telecommunication network must be reliable and easily accessible. At the beginning of this millennium, most developing countries were regarded as low-tech countries. However, after the end of the first decade of 21st century,
developing countries including least developing countries shows great improvement even some of the developing countries have gone beyond the level of the former high-tech countries.

Coming to the case of Ethiopia, despite the fact that majority of Ethiopian peoples are living in rural Ethiopia, technological penetration is high. Let’s look at Ethiopia’s readiness in light of the above parameters. To start with the readiness of importers and exporters, it is true that most of the Ethiopian importers and exporters are presumed to have the capacity to use available products of the existing technology. An anonymous respondent from Ethiopia Single Window Project believes that digitalization of international trade may not be challenged by the ability and readiness of private participants. He stated that both importers and exporters have the capacity to integrate and buy any communication system when there is a need to do so.

Coming to the readiness of government agencies, the government of Ethiopia has enacted national ICT policy and e-government strategies. According to the above anonymous respondent from the Ethiopia Single Window Project, the government is working for the achievement of electronic government delivery of services in two phases since 2011. The same respondent from the Ethiopian Single window Project stated that the government of Ethiopia is working for the installation of an electronic platform of international trade. According to him, so far, the project is working to integrate 20 government agencies and other entities through single electronic window system. The project has also a second phase and in the coming phase, priority will be given for digitalization of transport documents. The project is working on the development of enabling technological environment. Besides, as stated before the government has also agreed to purchase and install electronic customs clearance system technology with a South Korea company. The action of the government shows us that, it will be ready in the coming years in terms of technology which support electronic systems between the government agencies and other stakeholders of international trade.

Coming to the readiness of Ethiopia’s banks, according to Yared (2018), banks will not be reluctant to employ such system as they are the pioneer in terms of document and payment system digitalization in our country (Yared, 2018). Unlike other sectors, the banking sector has gone a lot in delivering electronic services (Yared, 2018). The writer of this paper believes that as far as there are secured system and workable legal environment banks may not be
reluctant to use electronic bill of lading. As a result, the technological readiness of Ethiopian banks may not become a setback for introduction of electronic bill of lading.

Coming to the readiness of Ethiopia’s national IT infrastructure and security of the system, in Ethiopia network connectivity is a big problem. There is no guaranty as to the existence of internet system even after a click. Moreover, electric power mess and extended periods of power cuts are a common occurrence in our country. As per Mr. Elias (2018), an Expert of Ethiopian Customs Clearance Project office of ERCA, the big challenge of introduction of any electronic transaction system is problems related to the strength of the central server of the country and problems relating to strength and speed of internet service (Elias, 2018). This shows that technological challenge related to internet service and reliability is one of the factors that may affect introduction of electronic bill of lading in Ethiopia.

To conclude, as far as problems relating to national IT infrastructure and power supply problem are alleviated, in terms of technology it is sound to argue that Ethiopia is ready for the introduction of electronic bill of lading in the near future.

5. Conclusion
The following factors are identified by this paper as justification for the introduction of electronic bill of lading in Ethiopia. The first justification is late arrival of bill of lading which results in unnecessary cost due to the delay of cargo clearance. The paper revealed that in Ethiopia, late arrival of bill of lading can be attributed to the following factors. The first factor is the fact that the foreign trade flow of Ethiopia is mainly towards the Middle East and South-East Asia countries in which the cargo transit time is too short. Besides, even the nature of cargoes imported to Ethiopia is mainly bulk cargoes which cannot be done through multimodal system. The second factor is the nature of Ethiopia’s foreign trade payment system. The study proved that the Ethiopian foreign exchange law puts a restriction on the amount of transaction to be processed on the mode of payment which does not require bill of lading for processing payment. Payment for all imports which worth more than USD 5,000, which amounts 98% of the whole import, is required to be processed and paid either through documentary credit or cash against document.
The second justification is vulnerability of paper bill of lading to loss and error, which in effect result in high cost to rectify the problem that is either for amendment or reissuance of the paper bill of lading. The paper revealed that like what is happening around the world, loss or discrepancy on the particulars of bill of lading is a usual challenge encountered by the business communities who are engaged in international trade.

The third justification is related to Ethiopia’s vulnerability for documentary fraud. The paper revealed that bill of lading is a document under target of fraudsters due to its special nature of being a document of title. In this regard, developing countries are the most vulnerable one due to the fact that parties involved in the process of the international business transaction lack the required skill and knowledge to detect the forged one from the genuine. The empirical analysis showed that Ethiopia as a developing country is vulnerable for fraudulent acts committed on paper bill of lading. The Ethiopian Shipping and Logistics Service Enterprise bill of lading have been forged many times.

Regarding the possible challenges of introduction of electronic bill of lading in Ethiopia, the study finds out that the problem related to the national IT infrastructure specially related to weak network connectivity and the existence of extended periods of power cuts are the possible challenge that would affect digitalization of this document. Regarding with the banks and government technological readiness, the empirical analysis revealed that both of them are working to have digitalized transaction; thus, there would not be problem in this regard.

References

Management, Bonds and Guarantees, Credit Insurance and Trade Finance. London, Kegan Page Limited,


15. Interview with Mr. Anteneh Girma, Manager of Trade Service Central Processing Unit at Commercial Bank of Ethiopia, *on the Reason behind the Most Prevalent Usage of Bill of lading and practical acallahenge of paper bill of lading*, May 4, 2018.


21. Interview with Temesgen Yihunie: Director of Logistics Coordination and monitoring Department of the Ethiopian Maritime Affairs Authority, *on the reason behind lateness of cargo clearance*, on May 7, 2018.


23. Interview with Mr. Yared Shiferaw, Legal, Insurance and Claims Department Director at Ethiopian Shipping and Logistics Services Enterprise, *on the Transport Documents used in Ethiopia*, May 7, 2018.


25. Maritime code of the Empire of Ethiopia, Article 187(3).