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# Introduction and Regulation of Electronic Bill Of Lading in Ethiopia: Appraisal of the Legal Environment and Lesson from International Recommendation

Israel, Woldekidan

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INTRODUCTION AND REGULATION OF  
ELECTRONICBILL OF LADING IN ETHIOPIA:  
APPRAISAL OF THE LEGAL ENVIRONMENT  
AND LESSON FROM INTERNATIONAL  
RECOMMENDATION

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June, 2018

Title Page

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RECOMMENDATION

Thesis

Submitted in Partial Fulfillment of the Requirements for the Degree of  
Master of Laws (LLM) in Business and Corporate Law at the School of  
Law, Bahir Dar University

By

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June, 2018

## Thesis Approval Page

The thesis titled **Introduction and Regulation of Electronic Bill of lading in Ethiopia: Appraisal of the Legal Environment and Lesson from International Recommendations** by Mr. Israel Woldekidan is approved for the degree of Master of Laws (LL.M).

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## Statement of Declaration

I, Israel Woldekidan declare that this Thesis titled "Production and Regulation of Electronic Bill of lading in Ethiopia: Appraisal of the Legal Environment and Lesson from International Recommendations" submitted in partial fulfillment of the degree of Master of Laws (LL.M) in Business and Corporate Law comprises my own work. To the best of my knowledge, this study has not been submitted for any degree in this University or any other University. In compliance with widely accepted practices, I have duly acknowledged and referenced all materials used in this work.

I understand that non-adherence to the principles of academic honesty and integrity, misrepresentation/fabrication of any idea/data/fact/source will constitute sufficient ground for disciplinary action by the University and can also evoke criminal sanction from the State and civil action from the sources which have not been properly cited or acknowledged.

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Date

## Dedication

This thesis is dedicated to my sister the late Mihret Woldekidan. Rest in Peace!!

## Acknowledgement

Completion of this work would have been impossible without valuable contributions from many individuals. First, my deepest gratitude goes to my advisor Dr. Solomon Abay (Associate Professor of law) for the patience, guidance, kindness and advice he has provided throughout this work. I have been extremely lucky to have an advisor who cared so much about my work and who responded to my questions and gave valuable comments on time.

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## Table of Contents

Title Page.....	i.
Thesis Approval Page.....	ii
Statement of Declaration.....	iii
Dedication.....	iv
Acknowledgement.....	v
Table of Contents.....	vi
List of Acronyms and Abbreviation.....	ix
Abstract.....	x
CHAPTER ONE: INTRODU CTION .....	1
1.1. Background of the Study.....	1
1.2. Statement of Problem.....	5
1.3. Objective of the Study.....	7.
1.3.1. General Objective.....	7
1.3.2. Specific objectives.....	7
1.4. Research Questions.....	7
1.4.1. Main research question.....	7.
1.4.2. Specific Research Questions.....	7
1.5. Literature Review.....	8
1.6. Research Methods and Methodology.....	8
1.6.1. Research Design.....	8
1.6.2. Data Sources and Gathering Methods.....	9
1.6.3. Data Analysis Method.....	9.
1.7. Significance of the Study.....	10
1.8. Scope and Limitation of the Study.....	10



1.10. Organization of the Study.....	10
CHAPTER TWO: CONCEPTUAL FRAMEWORK OF ELECTRONIC BILL OF LADING IN GENERAL AND ITS INTRODUCTION IN ETHIOPIA .....	12
Introduction.....	12
2.1. Documents Used in the International Commercial Transaction.....	12
2.2. Transport Documents.....	13
2.2.1. Road and Rail Transport Documents.....	14
2.2.2. Air Transport Documents.....	15
2.2.3. NonNegotiable Marine Transport Documents.....	15
2.2.3.1. Mate Receipt.....	16
2.2.3.2. Sea Waybill.....	16
2.2.3.3. Delivery Order.....	17
2.3. Bill of Lading.....	18
2.3.1. Origin and Historical Development of Bill of Lading.....	18
2.3.2. Definition and Function of Bill of Lading.....	21
2.3.2.1. Bill of Lading as Evidence of Contract of Carriage.....	22
2.3.2.2. Bill of Lading as Evidence of Receipt.....	23
2.3.2.3 Bill of Lading as Document of Title.....	25
2.3.3. Types of Bill of Lading.....	28
2.3.3.1. Negotiable Bill of Lading.....	29
2.3.3.2. NonNegotiable Bill of Lading.....	31
2.3.3.3. Thorough Bill of Lading.....	31
2.3.3.4. Multimodal Transport Bill of Lading/ Transport Document.....	32
2.3.4. Problems of Paper Bill of Lading.....	32
2.3.5. Solutions for Problem of Paper Bill of Lading.....	34
2.4. Electronic Bill of Lading.....	36

2.4.1. Dematerialization process of Bill of Lading.....	36
2.4.2. Definition of Electronic Bill of Lading.....	37
2.5. Introduction of Electronic Bill of Lading in Ethiopia.....	39
2.5.1. Transport Documents Used in Ethiopia Foreign Trade Regime.....	39
2.5.2. Factors that Necessities Introduction of Electronic Bill of Lading in Ethiopia..	41
2.5.2.1. Late Arrival of Paper Bill of Lading Which Results in Unnecessary Cost Due to Delay of Cargo Clearance.....	41
2.5.2.2. Loss, Error and High Cost for Amendment of Paper Bill of Lading.....	49
2.5.2.3. Ethiopia's Vulnerability for Documentary Fraud.....	51
2.5.3. Technological Readiness of Ethiopia for Introduction of Electronic Bill of Lading .....	54
CHAPTER THREE: LEGAL ISSUES OF ELECTRONIC BILL OF LADING AND ANALYSIS OF THE ETHIOPIAN LEGAL ENVIRONMENT .....	
3.1. Legal Issues of Electronic Bill of Lading.....	57
3.1.1. Introduction.....	57
3.1.2. Witing(Document) and Signature Requirement.....	59
3.1.3. Uniqueness and Guaranty of Singularity.....	62
3.1.4. Physical Possession and Transfer of Rights by Delivery.....	64
3.1.5. Identification, Authorization and Authentication of Holder and Issuer.....	65
3.1.6. Evidential Value of Electronic Bill of Lading.....	66
3.1.7. Issues Related to Amendment of Electronic Bill of lading.....	67
3.1.8. Formation of Contract Between the Endorsee and the Carrier.....	68
3.1.9. End of Life Cycle of Electronic Bill of Lading.....	68
3.1.10. Legal Issues Relating to Third Party Operator System.....	69
3.2. Analysis of the Existing Ethiopian Legal Environment in Light of Its Compatibility for Electronic Bill of Lading.....	70
3.2.1. Introduction.....	70

3.2.2. Policy.....	70
3.2.3. The 1960 Maritime Code.....	72
3.2.4. Multimodal Transport Goods Proclamation.....	74
3.2.5. The General Contract Law of Ethiopia.....	77
3.2.6. Security and Customs Laws of Ethiopia.....	79
3.2.7 The Ethiopian Evidence Law.....	80
3.2.8. Draft E Laws.....	81
CHAPTER FOUR: REGULATION OF ELECTRONIC BILL OF LADING UNDER THE UNCITRAL MODEL LAWS AND LESSON FOR ETHIOPIA. ...84	
4.1. Introduction.....	84
4.2. UNCITRAL Model Law on Electronic Commerce (1998).....	86
4.3. UNCITRAL Model Law on Electronic Transferable Records (2017).....	89
4.3.1. Functional Equivalence Rule for Writing and Signature Requirement....	90
4.3.2. Functional Equivalence Rule for Originality, Uniqueness and Singularity Requirement.....	91
4.3.3. Functional Equivalence Rule for Physical Possession and Transfer of Rights by Delivery Requirement and Identification of Holder.....	92
4.3.4. Rules on Amendment of Electronic Bill of Lading.....	94
4.3.5. Rules on Replacement or Conversion of Electronic Bill of Lading to Paper Bill of Lading and vice versa.....	94
4.5.6. Rules on Reliability of the Operator System.....	95
CHAPTER FIVE: CONCLUSION AND RECOMMENDATION .....97	
5.1. Conclusion.....	97
5.2. Recommendation.....	100
Bibliography .....	102

## List of Acronyms and Abbreviation

Art.	Article
ASYCUDA	Automated Systems for Customs Data
BOLERO	Bills of Lading Electronic Registry Organization
CBE	Commercial Bank of Ethiopia
CMI	Comité Maritime International
CMR of Goods by Road	Convention Relating to the Contract of International Carriage
EBL	Electronic Bill of lading
EDI	Electronic Data Interchange
ERCA	Ethiopia Revenue and Custom Authority
ETRs	Electronic Transferable Records
FDRE	Federal Democratic Republic of Ethiopia
FIATA	International Federation of Freight Forwarders Association
ICT	Information Communication Technology
LPI	Logistics Performance Index
MC99	Montreal Convention 1999
OECD	Organization for Economic Cooperation and Development
UN	United Nation
UNCITRAL	United Nation Commission on International Trade Law
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nation Development Program
UNECA	United Nations Economic Commission for Africa
USA	United States of America
USD	United States Dollar

## Abstract

Bill of lading is playing a vital role in the international commercial transaction since the time it has been employed. In terms of development this document has passes through different stages 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. Electronic bill of lading is not yet abundantly used by the maritime community for reason mainly attributed to lack of uniform international law governing such dematerialized bill of lading. However, national states enacted laws which govern electronic bill of lading to have a default uniform law governing such digitalization process. The study aimed to investigate the need for introducing electronic bill of lading in Ethiopia and the how about of its regulation. To this end, the study employed a blend of both doctrinal and socio-legal research type which is carried out through qualitative research methodology. Doctrinal research type was used to analyze the existing Ethiopian and international legislation, soft laws and scholarly writings, whereas the socio-legal research type was employed to look into whether there are factors that necessitate introduction of electronic bill of lading in Ethiopia or not. In doing so, first, the study examined factors that necessitate introduction of electronic bill of lading in Ethiopia and showed that there are actual demanding factors for introduction of it. Second, it looks into legal concerns of introducing electronic bill of lading and the existing Ethiopia legal environment in light of its room for accommodating electronic bill of lading and revealed that the law has gaps to address the legal concerns associated with Electronic bill of lading. Third, it studied that how legal issues of electronic bill of lading is regulated under the UNCITRAL Model Laws and the lesson Ethiopia draw from such recommendation. The thesis argued that Ethiopia should introduce electronic bill of lading and regarding its regulation shall take the UNCITRAL Model Law on Electronic Transferable Records and Electronic Commerce as a model. Finally, based on its findings the study forwarded recommendations to be taken by the government.

# CHAPTER ONE: INTRODUCTION

## 1.1. Background of the Study

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 trader 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. 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 as methods of communication across commercial transaction is questioned and subject to replacement by the electronic counterpart.

Shipping is the backbone of global trade in which 80% global trade in goods is carried by the marine industry.<sup>1</sup> Shipping and international trade are the two side of a coin. Therefore, it is indispensable to have shipping and logistics industry which couple up with the technological advancement. UN Trade and Development Commission advise states transition to an electronic environment in order to avoid problems of paper bill of lading which includes time and expense incurred in processing numerous documents, the time spent in waiting for the arrival of paper bill of lading at the port of discharge, and the cost and liabilities arising from delivery of goods without presentation of the original bill of lading.<sup>3</sup> The commission stressed that transition to electronic transfer of document would be very important for developing countries who always want to see their raw materials and commodities

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<sup>1</sup> Georgios Zekos, Documentation in the 2007 Draft convention on the carriage of goods wholly partly by sea, Neptunus, revue électronique, Centre de droit maritime et océanique de Nantes Vol.14, No. 1, 2008. [Here in after Zekos, Documentation in the 2007 Draft convention on the carriage of goods]

<sup>2</sup> European Community Ship Owners Association, ,Shipping and Global Trade: Towards an EU external shipping policy Chapter 1 at [http://www.ecsa.eu/images/PositionPapers2017/2017\\_27-ECSA-ExternalShippingAgendaFINAL.pdf](http://www.ecsa.eu/images/PositionPapers2017/2017_27-ECSA-ExternalShippingAgendaFINAL.pdf). [Last Accessed, December, 2017].

<sup>3</sup> UN Trade and Development Commission on Enterprise, Business Facilitation and Development, Seventh session Geneva, 28 February 2003.

to the global market with short time. Furthermore, the increased pace of commercial transaction which is the result of technological advancement in communication modes necessitates the transformation of paper bill of lading to a wireless and paperless document that must be acceptable to all the parties in the maritime trade who are directly or indirectly related. Accordingly, the shipping industry turns its attention on the dematerialization of paper bill of lading as the alternatives to negotiable paper bill of lading.<sup>5</sup>

The use of information technology to share information between organizations started since the 1970s. Information technology was used by businesses to transfer information to their customers or suppliers mostly through value-added networks.<sup>7</sup> Later on standard protocols were developed to computerize the process in electronic documents relating to purchasing, selling, shipping, receiving, and inventory, financial and other activities.<sup>8</sup> 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.<sup>9</sup> 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 1990s 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.<sup>11</sup> 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.

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<sup>4</sup> W John F Wilson, Carriage of Goods by Sea Act, Pearson Education Limited, Harlow, England, 2008, p.161. [Here in after Wilson, Carriage of Goods by Sea Act]

<sup>5</sup> Bury, Electronic Bills of Lading: A Never-Ending Story, p.212.

<sup>6</sup> Merrill Warkentin, Business to Business Electronic Commerce: Challenges and Solutions, Group Publishing USA, 2002, p. 24. [Here in after, Warkentin, Business to Business Electronic Commerce: Challenges and Solutions]

<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

<sup>10</sup> This period is a turning point in the world political, technological and economic change.

<sup>11</sup> Warkentin, Business to Business Electronic Commerce: Challenges and Solutions, p.26.

Among others, SeaDocs<sup>12</sup>, Bolero<sup>13</sup>, CMI<sup>14</sup>, The CargoDocs EBL<sup>15</sup>, The @Global Trade System<sup>16</sup>, The Trade Card System<sup>17</sup> and the Korean Trade Network<sup>18</sup> 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. In addition, 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.

Although there are technical and other factors which affect the development of electronic bill of lading across the maritime community, failure of the law to recognize and regulate takes the upper hand. However, after a decade of the technological innovation of electronic bill of lading, the issues of law are getting recognition. Accordingly, through the help of UNCITRAL United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea<sup>19</sup>, Model law on Electronic Commerce, Model on Electronic Signature, recently model law on Electronic Transferable Records are enacted. At the national level states has recognized and regulated electronic bill of lading. Besides, there are

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<sup>12</sup> The first attempt of digitalizing shipping documents and it was a system based in London to support electronic data transfer with the negotiability function.

<sup>13</sup> The Bill of lading Electronic Registry Organization formed by joint venture between SWIFT and TT Club, formed in 1996 through the help of EU.

<sup>14</sup> An international maritime institution called committee maritime international which is established in 1897.

<sup>15</sup> It was a venture developed by the ESS Company in 2003, operating in Malta to deal with electronic business documents that had been introduced like electronic bill of lading.

<sup>16</sup> Established by CCEWeb Corp, in 2000 to enhance the financial transaction across globe and later on the project upgraded to the logistics sector.

<sup>17</sup> US based company founded in 1999 by Kurt Cavano as a private firm, in order to provide global supply chain and financial supply chain.

<sup>18</sup> A Korean company established to provide paperless trade services include trade financing services, e-negotiation services for import/export bill of exchange, electronic letter of credit services and licensing services for import/export goods, FTA certificate of origin services, cargo insurance services, and electronic payment services for import/export charges. Its paperless trade services also comprise logistics and customs clearance document relay services, manifest consolidation system services, bill of lading services, and delivery order services.

<sup>19</sup> Commonly referred as Rotterdam Rules.



also contractual rules developed by private initiatives; in this regard CMI Rules and the Bolero Rule Book are mentionable.

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, its 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. In 2016 the annual total volume of Ethiopia's total export and import reached \$1,723,892,053 and \$19,120,743,254 in which the total import is steadily increasing on average by 12.5% per year between 2004/05 and 2015/16. Ethiopia is also acceding to the world trade organization which in effect catalyzes our international trade. Its share of international 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.<sup>21</sup> It has also automated the examination of import and export cargo. It is also working to upgrade the ASYCUDA++ to the ASYCUDA World system. In addition, 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.<sup>22</sup> 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.<sup>23</sup> Electronic Cargo Tracking system is the other modern system

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<sup>20</sup> Ethiopia: Trade Statistics,, at <https://globaledge.msu.edu/countries/ethiopia/tradestatistics> accessed on December 29, 2017].

<sup>21</sup> Ethiopia Custom and Revenue Authority, „Automating Foreign Trade Procedures“, at <http://www.erca.gov.et/index.php/about#automation-in-erca> >, Last accessed December 10, 2017].

<sup>22</sup> The Investment Climate Facility for Africa: „Ethiopia to improve trade facilitation“, at < <file:///electronic%20custom%20clearance/Ethiopia%20to%20improve%20trade%20facilitation.htm> >, [Last accessed December 10, 2017].

<sup>23</sup>

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.

Regarding the regulatory framework, the concept of bill of lading is recognized under the 1960 maritime code and the 1960 commercial code by having the function of carriage of contract, being a document of title and as evidence of the receipt of goods. In addition, recently the so called Multimodal Transport Document (multimodal/combined bill of lading) is recognized under Multimodal Transport of Goods Proclamation. The concept of electronic bill of lading is not mentioned in word under the maritime code. However, under the multimodal transport proclamation article 4/3 and 5/1 stated that the signature, as well as the document, may be signed and recorded in electronic form respectively.

## 1.2. Statement of Problem

In Ethiopia cargo can be transported from abroad through two main modalities of transportation that is either through carriage by air or carriage by sea. Besides, recently since 2012 the FDRE government has been realizing a multimodal transport system to achieve the plan on the modernization of the logistics sector primarily to address the long dwell times at the port and the demurrage in Djibouti.<sup>25</sup> Accordingly, the multimodal is used for importation of containerized cargo and some vehicle; and the unimodal is used for import of other cargoes and exports of all types of cargoes. According to the 2012/13 Ethiopian Shipping Line sectoral report, the total number of imports is shared between multimodal and unimodal is 43% and 57%, respectively. The goods transported through ocean which is either bulk or containerized cargoes are characterized by consolidation or deconsolidation near the source or destination which in effect would cost Ethiopia by the fact that, it

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<sup>24</sup> Ethiopia Custom and Revenue Authority, „Automating Foreign Trade Procedures“ <http://www.erca.gov.et/index.php/about#automation-erca>, Last accessed December 10, 2017].

<sup>25</sup> Tilahun Lemmi Butta and Mekonnen Bogale Abegaz, „Challenges in the operation of multimodal transport system: The case of Ethiopian shipping and logistics services enterprises“, International Journal of Applied Research, Vol.2 No.7, 2016, PP. 927-932, at p. 927. [Here in after Tilahun and Mekonnen, Challenges in the operation of multimodal transport system

is landlocked country. Therefore, there is a need to have well facilitated foreign trade regime in order to use the opportunities at hand at the possible lower cost.

Regarding the solution UNDP among others has recommended Ethiopia to give emphasis for the development of the logistics sector.<sup>26</sup> Particularly, it recommended to use electronic means of exchange of trade related data and financial transactions. Traditionally, all the documents serving the international trade which includes the contract itself, sales confirmation, purchase confirmation, commercial invoice, and letter of Credit, bill of lading (marine bill of lading, multimodal transport bill of lading, airway bill, and FIATA bill of lading) are interchanged manually. Hence, one who wants to import or export has to process all these documents manually which cost him too much energy, money, manpower and also with low efficiency and high error possibility. However, as we are living in the age of information technology in which everything is subject to technological application, international trade is digitalized. Recently, as mentioned under the background there are some government action towards digitalizing international trade transaction. This shows there is a move towards paperless trade which includes shipping documents.

As mentioned on the background, Ethiopia is using paper bill of lading though there are actual tendencies towards digitalizing it. However,

1. So far in Ethiopia, nothing is scientifically known as to whether there is an actual need to digitalize bill of lading or not?
2. There is also concern regarding the legal recognition or scope of recognition of electronic bill of lading in Ethiopia.
  - The case under the multimodal transport of goods proclamation. If argued it is recognized, there are worries about its insufficiency owing to the absence of detailed regulation.
  - The case under the Maritime Code, customs law and security law of Ethiopia
  - The case under the contract law: whether our law leaves the possibility of issuing electronic bill of lading within the framework of contractual autonomy.
3. There are concerns regarding the main issues that a law dealing with electronic bill of lading need to incorporate, upon the introduction of electronic bill of

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<sup>26</sup> National Logistics Strategy,, Available at <http://www.et.undp.org/content/ethiopia/en/home/library/poverty/national-logistics-strategy.html>, [last accessed on December 20,2018].

lading Accordingly, the researcher conducted the study to address the above mentioned concerns.

### 1.3. Objective of the Study

#### 1.3.1. General Objective

The primary and principal objective of the study is to investigate the need for introducing electronic bill of lading and regulation of it.

#### 1.3.2. Specific objectives

- Ø To explore whether there is a need for introduction of electronic bill of lading in Ethiopia or not?
- Ø To analyze and examine legal issues that need attention up on the introduction of electronic bill of lading.
- Ø To examine whether policies and laws in Ethiopia are able to accommodate electronic bill of lading.
- Ø To examine the possible regulatory remedies from the international recommendation that allows well functioning of electronic bill of lading and to propose lesson for Ethiopia.

### 1.4. Research Questions

#### 1.4.1. Main research question

The research is conducted to address the following interconnected research questions.

- ∇ Should Ethiopia introduce electronic bill of lading?
- ∇ If yes, how should the country regulate it?

#### 1.4.2. Specific Research Questions

- ∇ Are there factors that necessitate the introduction of electronic bill of lading in Ethiopia? If so, what are they?
- ∇ What are the possible challenges of recognizing electronic bill of lading in Ethiopia?

- What are the legal issues that need attention up on introduction of electronic bill of lading?
- Does the current legal environment adequately recognize and regulate electronic bill of lading?
- What lessons should Ethiopia draw from the international recommendation on regulation of electronic bill of lading?

## 1.5. Literature Review

To the best of the researcher knowledge; because of the fact that the concept of electronic bill of lading is not yet developed in our country, so far there is no any study conducted on the regulation and recognition of it. However, there are writings regarding the general legal status of electronic business transaction in Ethiopia, but not addressed the issue at hand. Nevertheless, at the international level there are many writings on the regulatory aspects of electronic bill of lading.

## 1.6. Research Methods and Methodology

### 1.6.1. Research Design

For properly addressing the research questions and objectives, the researcher employed qualitative research approach; as it is preferable due to the nature of the study; which needs acquiring deep information from the informants and deep legislative and secondary source analysis. In addition, its high degree of flexibility makes it suitable and better. Moreover, it is also more suitable to analyze data that is gathered through an interview as well as the analysis of legal and other texts that will be relevant to my study.

From qualitative research approach, the researcher used both doctrinal and empirical research type. By employing doctrinal research, the researcher analyzed the existing domestic and international legislations, soft laws and scholarly writings to address

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<sup>27</sup>Gebrehiwot Entehawu, The Legal Framework for Electronic Contracts in Ethiopia with Special Emphasis on General Contract Law, L.M thesis, Addis Ababa University, School of Law, 2013, [Unpublished, available online]. [ Here in after, Gebrehiwot Entehawu, The Legal Framework for Electronic Contracts in Ethiopia with Special Emphasis on General Contract Law, Tigist Ashenafi, The Legality of Ecommerce and Esignature Under Ethiopian Law, L.M thesis, Addis Ababa University School of law, 2017, [unpublished, available online]. [ Here in after, Tigist Ashenafi, The Legality of Ecommerce and Esignature Under Ethiopian Law

the second central research question. Empirical research type was employed to look into the practical challenge of paper of lading and the need for the electronic counterpart; which is to address first central research question

### 1.6.2. Data Sources and Gathering Methods

The researcher has used both primary and secondary sources of data. As a primary source of data, the researcher used inter, domestic laws, international binding legal instruments and soft laws. As secondary source the researcher used books, official government and non-governmental organization reports, journal articles, working papers, archival documents, master theses, Ph.D. dissertation, electronic sources and other available and relevant domestic and foreign literature regarding the issue at hand.

The participants of the study were personnel from Ethiopia Shipping and Logistics Service Enterprise, Ethiopia Maritime Affairs Authority, Commercial Bank of Ethiopia, Ethiopia Customs and Revenue Authority, Sijilo International Shipping and Freight Forwarding Agent, MACCFA Freight Logistics, the Ethiopia Electronic Single Window Project, Ethiopian Petroleum Supply Enterprise and Freighters International (PABOMI). To select these participants, the researcher employed purposive sampling which is based on the participants' experience, position, expertise, and other attributes to acquire general information which are vital to address the research questions of the study. This is because of the fact that in case of purposive sampling, sample can be built up in such a way that enables researcher to satisfy my specific needs in the study. In collecting data, the researcher employed semi-structured interview. Because it is the modest for research participants who are professionals as well as who has prior knowledge on the issue. Regarding the sample size, the researcher took more participants until the criterion of redundancy is met.

### 1.6.3. Data Analysis Method

The data gathered through both primary and secondary sources was analyzed by employing qualitative data analysis method. The researcher employed the accepted steps of qualitative data analysis process; which includes data preparation, familiarity with the data, interpreting the data and finally verification of the data.

## 1.7. Significance of the Study

This research is useful to the law maker and policy designer to appreciate the need of amending or enacting new laws which recognize and properly regulate electronic bill of lading as the transportation document equivalent to traditional papered bill of lading in international business transaction.

Over and above, it can provide a new insight for those who have interest on the subject matter. Specifically, by providing sufficient knowledge and understanding about importance of electronic bill of lading and its possible in Ethiopia.

## 1.8. Scope and Limitation of the Study

The study focused on the recognition and regulation of electronic bill of lading under Ethiopia legal regime. By electronic bill of lading, the study is only limited to the marine bill of lading. In doing so, it addressed the major theoretical and legal deliberation on recognition and regulation of electronic bill of lading in Ethiopia. Besides, this thesis analyzed international recommendation on regulation of electronic bill of lading to draw possible lesson for Ethiopia.

The major limitation the researcher faced while conducting this research were time constraint and lack of studies in relation to carriage contract bill of lading in Ethiopia. In addition, the fact that Ethiopia is under martial law has affected the researcher while browsing materials from internet.

## 1.10 Organization of the Study

In order to address all the objectives and to answer all the research questions of the study, the paper is structured into five chapters. The first chapter is general introduction of the study; which includes background of the study, statement of the problem, objectives, research questions, literature review, research methodology, significance, scope and limitation and organizational structure of the study. The second chapter deals with general conceptual framework about bill of lading and introduction of electronic bill of lading in Ethiopia. Chapter three deals with legal issues of electronic bill of lading and analysis of the Ethiopian legal environment in light of its compatibility for introducing electronic bill of lading. Chapter four of the paper deals about how electronic bill of lading is regulated under the UNCITRAL

Model Laws and the possible lesson to be drawn for Ethiopia. The last chapter is conclusion and recommendation



# CHAPTER TWO: CONCEPTUAL FRAMEWORK OF ELECTRONIC BILL OF LADING IN GENERAL AND ITS INTRODUCTION IN ETHIOPIA

## Introduction

In order to have a logical analysis of electronic bill of lading a thorough understanding of traditional paper bill of lading is necessary. Accordingly, this chapter brings into the light about documents used in the international commercial transaction, transport documents and its types, the bill of lading is, historical development of bill of lading's regulatory regime, function and types of bill of lading, problems of the traditional paper bill of lading and solution to alleviate such problem. The second part of this chapter addresses development of an electronic bill of lading in the international commercial transaction. The third part of this chapter is dedicated to address the introduction of electronic bill of lading in Ethiopia foreign trade regime.

## 2.1. Documents Used in the International Commercial Transaction

In the international commercial transaction cargo cannot cross national boundaries without passing extensive documentation process. As a result, sometimes cargoes may not reach to the proper destination for lack of the right documents at the required time. Most of those documents are necessary documents in order to proper international commercial transaction. Those documents are generally grouped in three broad categories.<sup>28</sup> The first group of documents is called commercial documents which can be exchanged as between the buyer and the seller.<sup>29</sup> Among others, commercial documents include request for quotation, Proforma invoice, purchase order, acceptance and confirmation, the contract itself and commercial invoice.<sup>30</sup> The second category of documents is banking documents in which the process of paying and being paid is to be conducted. In this regard unlike other

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<sup>28</sup> C. Rama Gopal Export Import Procedures: Documentation and Logistics ed., New Age International(p) Limited Publisher, New Delhi, India, 2008, PP. 13. [Hereafter, Rama Gopal, Export Import Procedures: Documentation and Logistics]

<sup>29</sup> Ibid.

<sup>30</sup> Commercial Transaction Documents < [http://instruction2.mtsac.edu/rjagodka/Importing\\_Information/DOCUMENTATION\\_Guide.pdf](http://instruction2.mtsac.edu/rjagodka/Importing_Information/DOCUMENTATION_Guide.pdf) last accessed March 28, 2018].

modes of payment, payment through Letter of Credit requires more complex exchange of documents. Those documents application for Letter of Credit, Letter of Credit, Advice of Letter of Credit and Drafts.<sup>31</sup> The third category of documents are transportation and insurance Documents. The very purpose of those documents is to keep path of merchandise as it passes from one hand to another and to ensure that the goods are not delivered to someone who is not entitled to receive it. As the concern of this thesis is Bill of lading as one transport document the next section deals with transport documents.

## 2.2. Transport Documents

In case of International commercial transaction sellers and buyers are located in different countries and even the goods which are subject to the transaction may not be in the hand of seller rather it may be in another country.<sup>32</sup> As a result, transportation of goods and on time delivery according to the trade terms and conditions is required for an effective commercial transaction. In international commercial transaction after the agreement has been made between the seller and buyer upon terms and conditions of the contract, they proceed with other important steps in the transaction, such as transportation, insurance, import and export clearances, preparing certifications of origin and administrative and commercial processes.<sup>33</sup>

International sales and transport contracts are different in terms of liability and documentation. International transport contracts, unlike sales contract which is characterized by freedom of contract, is governed by mandatory statutes detailing procedures and responsibilities of the transport process.<sup>34</sup> They are mostly subject to strict regulation either by national statutes or international conventions.<sup>35</sup> However, unlike transport contracts the terms of a sales contract are voluntarily

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<sup>31</sup> Rama Gopal Export Import Procedures: Documentation and Logistics, p. 26.

<sup>32</sup> United Nations Conference on Trade and Development The Use of Transport Documents in International Trade 2003 P.6. [Here in after, UNCTAD The Use of Transport Documents in International Trade]

<sup>33</sup> Marek Dubovec, The problems and possibilities for using Electronic Bills of Lading as Collateral, Arizona Journal of International & Comparative Law 2006, Vol. 23, No. 2 PP.437-466, p. 438. [Here in after, Marek Dubovec, the problems and possibilities for using Electronic Bills of Lading as Collateral]

<sup>34</sup> Id., p.439.

<sup>35</sup> Id., P.438

agreed between the buyers and sellers.<sup>36</sup> There are three kinds of transport and transport, maritime transport and air transport. Accordingly, either by the seller or the buyer arrangement the goods can be transported either of these. This transportation of goods involves the use of transport documents.<sup>37</sup>

Transport documents are defined in Article 1(14) of the Rotterdam Rules as a document issued under a contract of carriage by the carrier that: (a) evidences the carrier's or a performing party's receipt of goods under a contract of carriage; and (b) evidences or contains a contract of carriage. However, it does not mean that all transport documents have the function of being evidence for receipt of cargo and contract of carriage. Therefore, this definition is limited only to those documents which are commonly regarded as negotiable transport documents. Transport documents are documents issued by transport operators like Shipping Line, Airline, International Trucking Companies, Freight forwarders, Railway Operators, Logistics Company or their agents.<sup>38</sup> Depending on the type of transport the parties agreed to use, there are many types of transport documents employed by the transport industry. Transport documents among others required to serve as bearer of the information regarding the transport and about the terms and conditions to be applicable.

### 2.2.1. Road and Rail Transport Documents

In case of road transport, CMR Note is used as the main transport document across the world. CMR Note is an international consignment note used by air operators and forwarders which governs the responsibilities and liability of the parties to a contract for the carriage of goods by road.<sup>39</sup> It is a consignment note with a standard set of transport and liability conditions. CMR Note is an evidence which confirms that the carrier has received the goods and that a contract of carriage exists between the trader and the carrier.<sup>40</sup> CMR note is not a document of title as it does not

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<sup>36</sup> Marek Dubovec, the problems and possibilities for using Electronic Bills of Lading as Collateral p. 439.

<sup>37</sup> Ibid.

<sup>38</sup> "Transport Documents Used in International Trade", at <<http://www.globalnegotiator.com/files/TransportDocumentsUsedIn-InternationalTrade.pdf>>, [last accessed, March 28, 2018].

<sup>39</sup> "Transport Documents", at <<https://logistics.public.lu/en/formalities-procedures/required-documents/cargo-documents.html>>, [last accessed, March 26, 2018].

<sup>40</sup> Ibid.

necessarily gives the holder or the carrier rights of ownership or possession of the goods.

If the mode of transport is rail, Rail Consignment Note (CIM) is to be used. Rail Consignment Note is a document governed by the 1980 Convention concerning International Carriage by Rail (COTIF-CIM). It is issued by the carrier and is considered as the rail carriage contract. This document is transferable and is not requested upon arrival. Both the road and rail consignment note are digitalized. The digitalization process is not so difficult by the fact that both documents are not negotiable document and no need of having the original consignment note at the disposal port.

### 2.2.2. Air Transport Documents

In case of air freight, it is the air waybill which serves as transport document. An airwaybill is a contract of carriage between the shipper and the cargo carrier and it is issued by the air carrier and serves as a receipt for the shipper. Airwaybills are a nonnegotiable document and cannot be issued as document of title.<sup>41</sup> The International Air Transport Association has implemented electronic air waybill in the air cargo transport. The application of electronic air waybill requires the fulfillment of certain conditions; among others the shipper and the consignee must sign MC99<sup>42</sup> agreement. Moreover the electronic version of the standard electronic waybill must be accepted by the domestic custom authority.<sup>43</sup>

### 2.2.3. Non-Negotiable Marine Transport Documents

In the ancient societies there was no need of documentation of goods shipped on the vessel due to the fact that merchants either owned the vessels themselves or they accompanied the goods until sold at the destination.<sup>44</sup> As far as there is close control

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<sup>41</sup> Belay Seyoum, *Export-Import Theory, Practices, and Procedures*, Second Edition, Taylor & Francis, New York, USA, 2009, p.197. [Here in after, Belay Seyoum, *Export-Import Theory, Practices, and Procedures*]

<sup>42</sup> *Id.*, p.198.

<sup>43</sup> Montreal Convention 1999

<sup>44</sup> Shoaib Bakhtyar and Jan A. Persson, *Waybill Solutions and Connections to ITS Applications: Preliminary Analysis*, Blekinge Institute of Technology, 2015, p.8. [Here in after, Persson, *Waybill Solutions and Connections to ITS Applications: Preliminary Analysis*]

<sup>45</sup> Farhang Jafari, *The Concerns of the Shipping Industry Regarding the Application of Electronic Bills of Lading in Practice Amid Technological Changes*, PhD Dissertation, University of Sterling, 2015, [Unpublished Available at university of Sterling Repository], p.12. [Here in after, Farhang

of the ships by the merchants there is no need for documentation. However, due to the increase in the volume of trade their routes were extended. As a result, it was not practically possible for the merchant to remain physically present on each voyage.<sup>46</sup> This brought about the separation of merchant from carrier services. Consequently, the shipping and mercantile community employed many transport documents to alleviate such problem. These documents among others include Mate Receipt, Sea waybill, Delivery order or warranty, Charter Parties, Booking Note and Bill of lading.

### 2.2.3.1. Mate Receipt

Mate Receipt is a document which acknowledges the fact that the carrier has received the goods on board.<sup>47</sup> Subject to the terms of the mate receipt, the document may be evidence of the condition of the goods when received.<sup>48</sup> However, it is not necessarily evidence of a contract of carriage though it is an evidence of a bailment.<sup>49</sup> It is not negotiable or a document of title with the exception of particular circumstances such as by custom of a port or trade.<sup>50</sup>

### 2.2.3.2 Sea Waybill

The second marine transport document is a sea waybill. It is a document which evidences responsibility by the carrier to the consignee in order to deliver the goods to be transported to the person who is entitled to have it.<sup>51</sup> The sea waybill only serves as a receipt for the goods and evidence of a contract of carriage; unlike Bill of lading it is non-transferable and is not a document of title.<sup>52</sup> Therefore, there is no need for the waybill to be transferred to the port of release, it can remain in the hands of the transporter and the consignee does not need to present the waybill to obtain the

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Jafari, The Concerns of the Shipping Industry Regarding the Application of Electronic Bills of Lading in Practice Amid Technological Change

<sup>46</sup> Id., p.13.

<sup>47</sup> Rama Gopal, Export Import Procedures: Documentation and Logistics, p.20.

<sup>48</sup> Alan Mitchell, Bills of Lading: Law and Practice, Second edition, Springer Science+Business Media, B. V., Bristol, England, 1990, p. 52. [Alan Mitchell, Bills of Lading: Law and Practice

<sup>49</sup> Ibid.

<sup>50</sup> Ibid.

<sup>51</sup> Diana Faber, Shipping Documents and Electronic Data Exchange, Computers & Artificial Intelligence 1993, Volume 2, Number 1, p.24, p.24. [ Here in after, Diana Faber, Shipping Documents and Electronic Data Exchange

<sup>52</sup> UNCTAD, The Use of Transport Documents in International Trade.

goods. Mere identification of himself is sufficient.<sup>53</sup> However, the sea waybill text may be needed by customs, brokers or other authorities.<sup>54</sup> It is very paramount in circumstances where a single company might be transferring goods between its own international locations and payment for exports is not required to be made.<sup>55</sup> Sea waybill cannot be used when there is possibility of a sale of the goods while they are in transit.<sup>56</sup> In addition, sea waybill would be important if there were no letter of credit is in place or where the parties relationship is close and documentary security is not required.<sup>57</sup> Sea waybill is not expressly covered by the Hague and Hague Visby Rules though some domestic legislations gave recognition for it. Sea waybill does not have legal recognition under the Ethiopia law by the fact that Ethiopia maritime code is the replicate of the Hague and Hague Visby Rules.

### 2.2.3.3 Delivery Order

The third marine transport document is Delivery Order. Delivery Order is defined as "written order by the shipper that names the party to whom delivery is to be made."<sup>58</sup> Delivery order becomes important when a buyer of a bulk cargo wishes to sell different portions of the cargo to different buyers and he wishes to provide a device whereby the rights and obligations as to delivery of those portions can be protected.<sup>59</sup> It is in a case when the seller in the course of the voyage sells parts of the cargo to a number of different buyers.<sup>60</sup> In this case, the seller after surrendering the original bill to the carrier asks in return for a ship's delivery order for each parcel of cargo which he has sold.<sup>61</sup> Afterwards, the delivery orders will be passed to the individual buyers and they will pay for their parcels and they present the delivery

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<sup>53</sup> Boris Kozolchyk, "Evolution and Present State of Ocean Bill of Lading from a Banking Law Perspective," *Journal of Maritime Law and Commerce*, 1992, Volume 23, No.2, PP. 1-245, p. 216. [Here in after, Boris Kozolchyk, "Evolution and Present State of Ocean Bill of Lading from a Banking Law Perspective"]

<sup>54</sup> Ibid.

<sup>55</sup> Diana Faber, *Shipping Documents and Electronic Data Exchange*, p. 24.

<sup>56</sup> UNCTAD, *The Use of Transport Documents in International Trade*, p. 25.

<sup>57</sup> Ibid.

<sup>58</sup> Commercial Transaction Documents, at <

[http://instruction2.mtsac.edu/rjagodka/Importing\\_Information/DOCUMENTATION\\_Guide.pdf](http://instruction2.mtsac.edu/rjagodka/Importing_Information/DOCUMENTATION_Guide.pdf) [last accessed March 28, 2018].

<sup>59</sup> Richard Aikens, Richard Lord and Michael D. Boddie, *Bill of Lading*, Second ed., Taylor and Francis, Publisher London, England, 2015, pp 29. [Here in after, Richard Aikens et al, *Bill of Lading*].

<sup>60</sup> Diana Faber, *Shipping Documents and Electronic Data Exchange*, p. 25.

<sup>61</sup> Alan Mitchelhill, *Bills of Lading: Law and Practice*, p. 53.

orders to the carrier and will obtain the goods at the discharge port.<sup>62</sup> Delivery order is recognized and defined under the 1960 Maritime code of Ethiopia.<sup>63</sup>

## 2.3. Bill of Lading

### 2.3.1. Origin and Historical Development of Bill of Lading

Bill of lading is the oldest transport document which may trace back to the age of commerce and it is commonly defined through its function. The sources of origin of bill of lading are statutory laws regulating bill of lading, case laws involving bill of lading surviving copies of early bill of lading and merchants' practices. The translations of clay tablets excavated around Near East suggests that the bill of lading has existed in a distinguishable form as far back as Babylonian times although its existence has not been proved conclusively.<sup>64</sup> Moreover, during the Roman Empire, there is also an evidence which showed bill of lading was used by the business community. However, though there are divergent views regarding the proper birth place of modern bill of lading, it is agreed that it was born in the Eleventh Century in Europe because of the surge of the commercial cities of Mediterranean.<sup>65</sup> Since the rise of the Mediterranean commercial cities, there was a high flow of shipment of goods from port to port, which in turn led to disputes between shippers and the ships' masters as to what goods had been delivered on board.<sup>66</sup> Consequently, this fact necessitated evidence of delivery and statutes were passed by various cities of 1063 A.D. The statutes require every carrier to have a clerk who was obliged to take an oath of fidelity, and to enter in a parchment book or register a record of the goods received from the shipper.<sup>67</sup> These registrations were required to be made in the presence of the master, the shipper, and one other witness and the statute provided that this register should be evidence of the receipt of the goods.<sup>68</sup> The first

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<sup>62</sup> Alan Mitchell, Bills of Lading: Law and Practice, p.54

<sup>63</sup> Maritime Code of the Empire of Ethiopia, 1960, *Garit Gazetta* Extraordinary Issue, Proc. No. 164, 19<sup>th</sup> Year, No. 1 Article 195. [Hereinafter, Maritime Code of the Empire of Ethiopia].

<sup>64</sup> Samantha Peel, The Development of the Bill of lading: Its Future in the Maritime Industry, PH.D. Thesis, University of Plymouth 2002, [Unpublished, available at <http://hdl.handle.net/10026.1/407>], PP. 47. [Here in after, Samantha Peel, The Development of the Bill of lading: Its Future in the Maritime Industry].

<sup>65</sup> Ibid.

<sup>66</sup> Chester B. McLaughlin, Jr, The Evolution of the Ocean Bill of lading, 1926, *The Yale Law Journal*, Vol. 35, No. 5, pp. 545-570, p. 554. [Here in after, McLaughlin, Jr, The Evolution of the Ocean Bill of lading].

<sup>67</sup> Ibid.

<sup>68</sup> McLaughlin, Jr, The Evolution of the Ocean Bill of lading, p.555.

recorded evidence of the bill of lading which has the features of present day bills of lading can be traced back to the 15<sup>th</sup> century transaction of wheat transported to Alexandria, Egypt.<sup>69</sup> This recorded bill of lading has most of the qualities of the present day bill of lading; as it has the receipt function, details of goods shipped and a promise on the part of the carrier to carry and deliver the goods to the agreed destination.<sup>70</sup>

Until sixteen and seventeenth century, bill of lading only served as a receipt of goods as the number of cargoes per ship was too small the bill of lading need not perform a contractual evidence function.<sup>71</sup> During the sixteenth and seventeenth centuries, when it became difficult to enter a charter party with every shipper, bills were issued that contained the contract of carriage.<sup>72</sup> Most importantly, by the eighteenth century, the bill of lading recognized as negotiable by endorsement to address the needs of those merchants who wished to dispose of their goods before the vessel reached its destination.<sup>73</sup> This function set a bill of lading from the other shipping documents and negotiability of goods in transit was made possible by mere act of endorsement and delivery.

Regarding the regulatory development of bill of lading, it has passed through different stages. During the medieval period, it was regulated by statutes of states. After seventeenth century case laws were developed in England and other common law countries. The first national state which enacted legislation of bill of lading is the USA, which is Harter Act of 1893.<sup>74</sup> At the international level, the first international conference for the creation of a uniform international system to regulate bill of lading was held in The Hague in 1921 and the Maritime Law Committee of the International Law Association drafted the rules.

However, although the intention of the committee was to make this rule as a guideline to be adopted voluntarily by the shipping communities, it was not

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<sup>69</sup> Farhang Jafari, The Concerns of the Shipping Industry Regarding the Application of Bills of Lading in Practice Amid Technological Change, pp.

<sup>70</sup> Ibid.

<sup>71</sup> Richard Aikens et al. Bill of lading, p. 8.

<sup>72</sup> Ibid.

<sup>73</sup> Wilson, Carriage of Goods by Sea Act, p. 1.

<sup>74</sup> Daniel E. Murray, History and Development of the Bill of Lading, University of Miami Law Review 1983, Volume 37, Issue 3, PP. 689-703. [Murray, History and Development of the Bill of Lading].



practicable.<sup>75</sup> As a result, there was a need to make it obligatory and International conference was held in Brussels that ended The Hague Rules become compulsory and reenacted as International Convention for the Unification of Certain Rules Relating to Bills of Lading in 1924.<sup>76</sup> These rules were adopted throughout the world for forty years.

However later on due to its limited areas of coverage and its limited protection given to cargo owner, an International conference held in Visby, Sweden, amendments were made to The Hague Rules and the amendment is incorporated as Brussels Protocol of 1968; which is called The Hague-Visby Rules.<sup>77</sup> However, many developing countries sensed that the Hague-Visby rules did not address the legitimate concerns of cargo owners or shippers. As a result, the United Nations Commission on International Trade Law (UNCITRAL) was given the task of drafting a new convention and finally in 1978 it came up with new convention called Hamburg Rules.<sup>78</sup> Nevertheless, it came in to practice after 10 years of its enactment. But, still there were problems which are not addressed by the Hamburg Rules. Most importantly an evolutionary modernization of transport practices like containerization, door-to-door transport contracts and the use of electronic transport documents necessitated a new international legal framework on carriage of goods by sea.<sup>79</sup> Consequently, the UNCITRAL working group on transport law came up with United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea in 2009. However, this convention is not yet coming in to practice as the required number of ratification is not met.

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<sup>75</sup> Boris Kozolchyk, Evolution and Present State of Ocean Bill of Lading from a Banking Law Perspective p. 194.

<sup>76</sup> Ibid.

<sup>77</sup> Ibid.

<sup>78</sup> Boris Kozolchyk, Evolution and Present State of Ocean Bill of Lading from a Banking Law Perspective p. 194.

<sup>79</sup> Meltem Deniz Gu"neO"zbek, The United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea: An Appraisal of the Rotterdam Rules 1<sup>st</sup> ed., Springer, Heidelberg, Germany, 2011, p. 51. Herein after, Meltem Deniz An Appraisal of the Rotterdam Rules

### 2.3.2. Definition and Function of Bill of Lading

Before proceeding to deal about the function of lading, it is better to see the literal and legal definition of bill of lading from different sources. According to Richard Aikens and et al (1996) an elephant, bill of lading is generally easier to recognize than to define<sup>80</sup> and mostly it is defined in terms of its characteristics. However, it does not mean that it has no literal as well as legal definition. Black's Law Dictionary defines it as;

document acknowledging the receipt of goods by a carrier or by the shipper, agent and the contract for the transportation of those goods; a document that indicates the receipt of goods for shipment and that is issued by a person engaged in the business of transporting or forwarding goods.<sup>81</sup>

According to this definition, bill of lading is only an evidence for contract of carriage and receipt of goods. This definition does not address the third function of bill of lading that is serving as a document of title. Therefore, for the writer of this paper, it is not a fulfilled definition rather only limited to the non-negotiable bill of lading. An American judge Mr Justice Clifford says that bill of lading is "

a written acknowledgment signed by the master that he has received the goods therein described from the shipper, to be transported on the terms therein expressed to the described place of destination and there to be delivered to the consignee or parties therein designated.<sup>82</sup>

This definition gave emphasis for the receipt function of bill of lading nothing is stated as to its function as evidence of contract. However, the parties therein designated tell us that this definition includes the third function of bill of lading that is being a document of title.

Coming to the international instruments regulating bill of lading, both The Hague and Hague-Visby rules do not define what bill of lading is. However, the 1978 United Nations Convention on the Carriage of Goods by Sea (Hamburg Rules) unlike its predecessors define bill of lading as follows. Bill of lading means

document which evidences a contract of carriage by sea and the taking over or loading of the goods by the carrier, and by which the carrier undertakes to deliver the goods against surrender of the document [and has] provision in the document that the goods

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<sup>80</sup> Richard Aikens et al Bill of lading, p.24.

<sup>81</sup> Black's Law Dictionary, 9th ed., s.v. „Bill of lading.“

<sup>82</sup> W. P. Bennett, The History and Present Position of Bill of lading as a Document of Title to Goods 1<sup>st</sup> ed., Cambridge University Press, England, 1914, pp. 79. [Here in Bennett, The History and Present Position of Bill of lading as a Document of Title to Goods

are to be delivered to the order of a named person or to order, or to bearer, constitutes such an undertaking.<sup>83</sup>

The first sentence of the above definition addresses the orthodoxy function of a bill of lading that is its function as evidence for contract of carriage and receipt of goods. Moreover, the phrase "to order or to bearer" from the second sentence tells us that it can be negotiable which in effect serves as a document of title. The United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea gave a definition for the whole marine transport document; no specific definition is given for a bill of lading. Henceforth, as a bill of lading is the main marine transport document, the definition given for transport document is inclusive of a bill of lading. Transport document is defined as a document issued under a contract of carriage by the carrier that evidences the carrier's receipt of goods under a contract of carriage and evidences the contract of carriage itself.<sup>84</sup> Besides, this convention also divided transport documents into negotiable and non-negotiable transport documents. By doing so, it acknowledged a bill of lading as a document of title.

From the above given definitions, it is fair to deduce that a bill of lading is an evidence for contract of carriage, receipt of goods by the carrier and a document of title to goods.

### 2.3.2.1. Bill of Lading as Evidence of Contract of Carriage

Despite the fact that there is a difference in the content of the contract of carriage between the jurisdiction to jurisdiction, it is commonly understood that to promise to transport and to deliver the goods given by the ship-owner constitutes the essential of every contract of carriage. This right and obligations are evidenced by a bill of lading.<sup>85</sup>

A paper bill of lading in its complete form has contract clauses printed on the back of the paper document.<sup>86</sup> The terms and conditions on the reverse side of a bill of lading can provide evidence of contract of carriage but does not constitute as

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<sup>83</sup> United Nations Convention on the Carriage of Goods by Sea (Hamburg Rules), 1994, Article 1(7). [Here in after, United Nations Hamburg Rules]

<sup>84</sup> United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea (the Rotterdam Rules), 2009, Article 1(14). [Here in after, UN, Rotterdam Rules].

<sup>85</sup> United Nations Commission on International Trade Law Working Group on Electronic Data Interchange Secretariat Note on Electronic Data Interchange, Vienna, Austria, 1996, pp.10. [Here in after UNCITRAL working Group on Electronic Data Interchange, Electronic Data interchange].

<sup>86</sup> Ibid.

contract of carriage itself.<sup>87</sup> The contract of carriage is in normal circumstance concluded orally before the bill of lading is issued. Here it is good to know that if the goods are lost or damaged before the bill of lading is issued and also if the terms of the bill of lading do not comply with those of the earlier oral agreement, the shipper will not be deprived of a remedy for breach of contract, rather he /she can prove by producing oral evidence to establish the terms of that agreement.<sup>88</sup>

The other issue regarding bill of lading function as evidence of contract is the fact that whether it serves as an evidence for the contract between the carrier and third party-endorsee. Generally, the third party-endorsee is considered to be a good faith purchaser of the goods mentioned in bill of lading on the terms and conditions mentioned in that.<sup>89</sup> As a result, any variation in the actual contract between the carrier and the shipper would not affect the bona fide endorsed.<sup>90</sup> The very oral contract between the carrier and the shipper at the time of sailing cannot be used as a defense unless it is properly included on bill of lading.<sup>91</sup> Therefore, a bill of lading itself is an exclusive evidence of the contract between the carrier and third party-endorsee.<sup>92</sup> However, in case of charter party contract, bill of lading is not an evidence of the contract between the issuer and charter party, rather evidence of a contract between the parties.<sup>93</sup>

### 2.3.2.2. Bill of Lading as Evidence of Receipt

As a matter of fact, the receipt function is the primary function of any transport document. Likewise, from the inception of bill of lading itself, the very purpose of bill of lading was to serve as a receipt which was required to obtain delivery of the goods at the port of discharge. Bill of lading has three receipt function though

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<sup>87</sup> Wilson, Carriage of Goods by Sea Act, 1924, p. 27.

<sup>88</sup> *Ibid.*

<sup>89</sup> Farhang Jafari, The Concerns of the Shipping Industry Regarding the Application of Electronic Bills of Lading in Practice Amid Technological Change, pp.66.

<sup>90</sup> Krailerk Euarjai International Carriage of Goods by Sea: Problems in Bills of Lading and Their Impact in Australia and its Major Trading Partners in Asia, L.M Thesis, University of Tasmania 1999, [Unpublished available at], p. 53. [ Here in Krailerk Euarjai, International Carriage of Goods by Sea: Problems in Bills of Lading and Their Impact in Australia and its Major Trading Partners in Asia

<sup>91</sup> *Ibid.*

<sup>92</sup> Farhang Jafari, The Concerns of the Shipping Industry Regarding the Application of Electronic Bills of Lading in Practice Amid Technological Change, pp.67.

<sup>93</sup> *Ibid.*, pp.65.

there is some difference regarding the details of each function between the common law and The Hague and Visby rules.

The first function is; it is a receipt as to quantity. Under the common law legal system, the bill of lading is prima facie evidence of the weight or quantity of goods shipped.<sup>94</sup> Here, the carrier has the burden of proving that the goods stated in the bill were not shipped, which is very difficult and unlikely to prove the otherwise as he is required to clearly establish that the goods were not in fact shipped.<sup>95</sup> Under the Hague Rules, it is upon the shipper's request that the carrier issues a bill of lading describing the quantity of the goods to be shipped.<sup>96</sup> Therefore, the carrier is not obliged to issue a bill in order to acknowledge the quantity of cargo shipped as far as he is not required to do so by the shipper.

The same position is taken by the Ethiopian maritime law since the source of Ethiopian maritime law is The Hague Rules. As per article 183(1) of the 1960 maritime code of Ethiopia, Bill of lading shall show.. the number of packages, and objects, or the quantity or weight of the goods, in accordance with the particulars given by the shipper in writing before shipment,<sup>97</sup> Like what is stated under the Hague rules, a prior request by the shipper is required. Generally, under both circumstances, the signature of the carrier on the bill is enough to prove the goods shipped.

The second function is receipt as to the condition or quality of the goods shipped. Goods shipped are mostly provided with a statement as to the apparent order and condition of the goods. This statement is among the central elements of a bill of lading. The problem is how apparent it is. What is mostly agreed under both the common law and the civil law legal system is that it is sufficient if the carrier has a frank belief on the accuracy of the statement and this belief is the one that could be taken by a reasonable carrier.<sup>98</sup> Therefore, the carrier or his agent is required to judge by a reasonable outward inspection, not the absolute accuracy of statements. Under the Ethiopian maritime code, the reasonable man standard measurement is adopted.<sup>99</sup>

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<sup>94</sup>Wilson, Carriage of Goods by Sea, 118

<sup>95</sup> Ibid.

<sup>96</sup> Wilson, Carriage of Goods by Sea, 120.

<sup>97</sup> Maritime Code of the Empire of Ethiopia, Article 183(1).

<sup>98</sup> Wilson, Carriage of Goods by sea, 121-122

<sup>99</sup> Maritime Code of the Empire of Ethiopia Article 183(3).

Both under the common law as well as The Hague/ Hague Visby rules, statements as to the condition in which goods are shipped are prima facie evidence for the shipper and become conclusive evidence once the bill transferred to the hands of a good faith holder of it.<sup>100</sup>

Thirdly, bill of lading is a receipt as to the leading marks. Leading marks are the identity or description of the goods for the identification purpose and the statements in the bill of lading has container numbers, serial numbers and other items, such as marks on the packages etc.<sup>101</sup> Both under the common law and the Hague and Hague Visby rules, such statements have prima facie evidence against the carrier and conclusive evidence when the bill is transferred to the good faith holder of it.<sup>102</sup> Despite the fact that receipt function is a common function of every transport documents, it would become very important in case of bill of lading. This is due to the fact that the negotiability and sale of the goods in transit demand the reproduction of the proper quantity, quality and condition of the goods on the ship.<sup>103</sup>

### 2.3.2.3 Bill of Lading as Document of Title

As to what is to mean by document of title, there is no statutory definition given under any of international legal instruments governing carriage by sea in general and bill of lading in particular. As per the Black's law dictionary, document of title is defined as "written description, identification, or declaration of goods authorizing the holder...to receive, hold, and dispose of the document and the goods it covers."<sup>104</sup> This definition has two elements; one thing it is a written declaration of goods that represent the goods constructively second it is an authorization to dispose or otherwise of the goods and the document. Bill of lading recognized as a document of title a decision made two centuries ago in the case of Lickbarrow v Mason.<sup>105</sup> Since then, the development of bill as a document of title has been

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<sup>100</sup> Wilson, Carriage of Goods by sea, pp., 124-125.

<sup>101</sup> Farhang Jafari, The Concerns of the Shipping Industry Regarding the Application of Electronic Bills of Lading in Practice Amid Technological Change, 49.

<sup>102</sup> Wilson, Carriage of Goods by Sea, 126.

<sup>103</sup> Farhang Jafari, The Concerns of the Shipping Industry Regarding the Application of Electronic Bills of Lading in Practice Amid Technological Change, 49.

<sup>104</sup> Black's law dictionary, pp. 555

<sup>105</sup> Lickbarrow vs Mason [1794] is a landmark case in the history of bill of lading to determine whether a Bill of lading has a document of title function or not. The case is litigated more than six years in England and finally the court decides that by the custom of merchants the transfer of a Bill of lading always transfers constructive possession of the cargo to the transferee.

successful and it exercises a tripartite role in relation to the contract of carriage, to the sale of goods in transit, and to the raising of a financial credit.<sup>106</sup>

Unlike other transport documents used in the international commercial transaction, the function of the bill of lading as a document of title is a unique feature.<sup>107</sup> In addition to the shipper-carrier relationship, the bill of lading through its function as a document of title produces effects in the context of the carrier/consignee and buyer/seller relationships.<sup>108</sup> The negotiability of bills of lading came into being in sea transport due to the fact that the voyages were normally lengthy, and<sup>109</sup> the owners of cargo need a document of title to sell the goods in transit and in order to raise credit for an international sale.<sup>110</sup>

The first role of the bill of lading as a document of title is its function in the contract of sale. Indorsement and delivery of the bill of lading transfers ownership from the shipper to the endorsee. However, according to Wilson, the fulfillment of the following conditions is required.<sup>111</sup> First, the bill has to be transferable on its face that can expressly deliver to the order or assign to the shipper or consignee. Second, the goods must be in transit at the time of the endorsement. However, this does not mean that the cargo needs to be at sea; rather it may be under the possession of a forwarding agent or carrier for the purposes of carriage and not yet be handed by the carrier who is entitled to deliver it to the port of disposal. Third, the bill must be initiated by a person with a good title as an endorsee attains no better title than that held by the endorser. Fourth, the endorsement must be accompanied by an intention to transfer the ownership in the goods covered by the bill of lading. The endorsement should not be an in-house movement of goods transnational business entities located in different states.

Bill of lading by being a document of title has an important function in financing a contract of sale. It is known that buyers and sellers have opposing and conflicting interests. In the normal course of things especially in the international trade

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<sup>106</sup> Wilson, Carriage of Goods by Sea, pp. 131.

<sup>107</sup> Torsten Schmitz, The Bill of Lading as a Document of Title, *Journal of International Trade Law and Policy* 2011, Vol. 10, Issue 3, pp. 252-280, p. 260-261. [Hereinafter, Torsten Schmitz, The Bill of Lading as a Document of Title]

<sup>108</sup> UNCITRAL working Group on Electronic Data Interchange, Electronic Data interchange, pp. 60.

<sup>109</sup> Wilson, Carriage of Goods by Sea, pp. 130.

<sup>110</sup> Ibid.

<sup>111</sup> Id., pp. 131-132.

buyer wants to examine the goods as to whether they are in conformity with the sale contract or not before performing payment. Similarly, the seller also does not want to release the goods for transportation unless he gets a guaranty that the agreed contractual price will be paid.<sup>112</sup>

Bill of lading as a document of title can reconcile this opposing and conflicting interest of the parties under international sales contract. Under international trade banks have an important role in financing contract of sale through a system of documentary credits.<sup>113</sup> Though banks may have another security, the guarantee against non-payment of the credit entered by the buyer, the possession of the bill of lading as a document of title to the goods.<sup>114</sup> In a documentary credit system the eventual buyer requests his bank commonly called buyers bank to open a credit in favor of the seller and. On the other side the seller is also required to ship the contract goods and then to submit appropriate documents in the required form to the bank. According to Wilson bill of lading has very much importance in a documentary credit transaction. He stated that, the preliminary step the bank is able to check the information on the bill to guarantee that the seller has adhered with all the conditions levied by the bank for granting the credit before it makes any advance payment.<sup>115</sup>

Thus, statements on the bill indicating the quantity and description of the goods shipped will be checked with the corresponding details on the sales invoice to see if there is any discrepancy.<sup>116</sup> Of equal importance to the bank will be the date on which the goods were shipped, whether they were shipped in good order and condition and whether or not they were loaded on deck.<sup>117</sup>

Moreover, the banks also interested in its attribute as a negotiable document of title. If the bill of lading is not negotiable, it cannot be able to provide the required security for the credit the bank has given. If it is negotiable, at the end of the day if the buyer fails to perform payment, the bank can control and own the goods through that

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<sup>112</sup> Torsten Schmitz The Bill of lading as a Document of Title, p. 268.

<sup>113</sup> Wilson, Carriage of Goods by sea, p. 133.

<sup>114</sup> Torsten Schmitz The Bill of lading as a Document of Title, p. 268.

<sup>115</sup> Wilson, Carriage of Goods by Sea, p. 135.

<sup>116</sup> Bill of lading Financing, available at <<http://www.handybulk.com/bill-of-lading-financing>>, Last accessed, on march 20, 2018].

<sup>117</sup> Wilson Carriage of Goods by sea, p. 133-134.



negotiable bill.<sup>118</sup> Therefore the function of bill of lading as document of title is central and pivotal in making the international trade more effective through financing international sale contract.

Thirdly, bill of lading through its function of a document of title has an important function to have an effective carriage contract. Bill of lading as a document of title would impact right to control and right to claim delivery of goods. The right to control and to claim delivery of goods includes to stop the goods in transit, their withdrawal already at the terminal of departure, to unload, to warehouse or to reroute the goods, and to deliver the goods to some other person than the first consignee indicated in the bill of lading at any stage of the transit, as well as to change the place of delivery of the goods.<sup>119</sup> This all rights are under the exclusive control of the consignor from the moment the carrier takes charge of the goods as far as the consignor retains all originals of the bill of lading.<sup>120</sup> However, after the consignor has transferred one negotiable original bill of lading, the consignor loses that right of control and the one who has that original bill of lading can claim delivery of the goods as soon as they reach the place of final destination or can order anything that he wants.<sup>121</sup>

### 2.3.3. Types of Bill of Lading

Differentiating and identifying the different forms of bill of lading is very crucial to fully understand the function and importance of the document itself and to appreciate and understand how all the elements under those different forms can be converted into an electronic format. Despite the fact that there are widely practiced types of bill of lading across the world, there is no single agreed list of bills of lading rather there are regional and local differences on the names and features of these bills of lading.<sup>122</sup>

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<sup>118</sup> Wilson Carriage of Goods by sea, 133134.

<sup>119</sup> UNCITRAL working Group on Electronic Data Interchange, Electronic Data interchange, p.11.

<sup>120</sup> Ibid.

<sup>121</sup> UNCITRAL working Group on Electronic Data Interchange, Electronic Data interchange, 12.

<sup>122</sup> Farhang Jafari, The Concerns of the Shipping Industry Regarding Application of Electronic Bills of Lading in Practice Amid Technological Change, 24.

Bill of lading according to different needs of application can be divided into different categories.<sup>123</sup> According to the nature of its transferability bill of lading can be classified into three as straight consigned to order and bearer bill of lading. Straight consigned bill of lading is regarded as non negotiable bill of lading; whereas the latter two; to order and to bearer bills are negotiable bill of lading. Secondly, taking the fact that whether the goods are shipped or not, it can be divided into board bill of lading and for shipment bill of lading. Moreover, depending on the condition of the goods shipped bill of lading can be classified to clean and closed (unclean) bill of Lading. Furthermore depending on the mode of transport used and the centers of distribution, it can be divided into direct, thorough and multimodal bill of lading. Sometimes, it is also usual to find classification of bill of lading as a short form and long form bill of lading. As the research is concerned on the electrification of bill of lading, the next part addresses those types of bill of lading which needs an attention for such process.

### 2.3.3.1. Negotiable Bill of Lading

The orthodoxy presumption is that bill of lading is a transferable document as far as it is stated as negotiable by the shipper when drawing up the bill.<sup>124</sup> Negotiable transport document bill of lading is legally recognized under The Hague, Hague Visby, Hamburg and Rotterdam Rules. However, it is the Rotterdam Rules which expressly define as to what is to mean by negotiable bill of lading.

It is defined as;

[t]ransport document that indicates, by wording such as "to order," or "negotiable," or other appropriate wording recognized as having the same effect by the law applicable to the document, that the goods have been consigned to the order of the shipper, to the order of the consignee, or to bearer, and is not explicitly stated as being "non negotiable," or "not negotiable";<sup>125</sup>

<sup>123</sup>Classifications of Bill of lading, at <  
[http://resources.alibaba.com/topic/800027530/Classification\\_of\\_Bill\\_of\\_Lading.htm](http://resources.alibaba.com/topic/800027530/Classification_of_Bill_of_Lading.htm), [last accessed, on March 30, 2018].

<sup>124</sup> Paul Todd, Principle of Contract of Carriage by Sea, First ed. Routledge London, United Kingdom, 2016, pp. 239. [Here in after, Paul Todd, Principle of Contract of Carriage by Sea]

<sup>125</sup>United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea, 2009 Article 1(15). [ Here in after, The Rotterdam Rules]. See also negotiable transport document, available at <  
[http://scm.gsom.spbu.ru/Negotiable\\_transport\\_document.htm](http://scm.gsom.spbu.ru/Negotiable_transport_document.htm), [last accessed on March 22, 2018].

As per this definition negotiable bill of lading can be to the order of the consignee, to the order of the consignor or to bearer. Besides, that document does not explicitly stated as being nonnegotiable or not negotiable.

In Ethiopia both to order or to bearer Bill of lading are recognized under the maritime code as well as the multimodal transport proclamation.<sup>126</sup>

#### A. Order bill of lading

An order bill is a commonly used bill of lading by the International marine community. Order bill of lading is one where there is a description on the bill to a consignee or to his order, or to consignee or his assigns.<sup>127</sup> An order bill of lading may also be made where the consignee is simply a named person but other parts of the bill indicate a requirement to deliver to his order and/or or assigns.<sup>128</sup> The fact that stipulation is there as to the order or assigns of the consignee gives flexibility regarding the transferability of the bill to the third party by an endorsement of the bill as it is or in a blank.

#### B. Bearer or blank bill of lading

Bearer bill of lading is a bill in which there is no requirement for the carrier to deliver the good either to the named consignee or endorsee rather the carrier is required deliver it to anyone who holds the bill.<sup>129</sup> Commonly on the face of order or blank bill, there is an explicit mentioning of the words "bearer of the document" without mentioning any name or the words "as to the order thereof". Bearer (blank) bill of lading is easily transferable and it is a document of title. It can be converted into another type of bill by endorsement of the holder.<sup>131</sup>

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<sup>126</sup> Maritime Code of the Empire of Ethiopia, Article 189 and Multimodal Transport of Goods Proclamation, 2007, Federal Negarit Gazette Proc. No. 548, 13<sup>th</sup> Year, No. 59, Article 6(1). [ Herein after, Multimodal Transport of Goods Proclamation No. 548].  
, Article 6(1).

<sup>127</sup> Richard Aikens et al, Bill of lading, p. 33.

<sup>128</sup> Farhang Jafari, The Concerns of the Shipping Industry Regarding the Application of Electronic Bills of Lading in Practice Amid Technological Change, p. 27.

<sup>129</sup> Id, pp.28.

<sup>130</sup> Farhang Jafari, The Concerns of the Shipping Industry Regarding the Application of Electronic Bills of Lading in Practice Amid Technological Change, p. 27.

<sup>131</sup> Richard Aikens et al, Bill of lading, p. 32.

### 2.3.3.2. Non-Negotiable Bill of Lading

Non-negotiable bill of lading is commonly referred to as a straight or non-transferable bill of lading. Non-negotiable bills of lading have commercial application where a negotiable document is not required. This is in cases where the identity of the consignee is known from the outset, the goods are not of a type that are likely to be resold, and also for shipping items that have already been paid for.<sup>132</sup> Non-negotiable bill of lading is very important to lessen the risks of the carrier by the fact that the consignee is the only person entitled to claim delivery at the port of discharge.<sup>133</sup> However, unlike other non-negotiable transport documents, specially the sea waybill, the consignee is required to present it before the carrier in order to have the cargo.<sup>134</sup>

### 2.3.3.3. Thorough Bill of Lading

In literature, we can also find that thorough bill of lading is named as a transshipment bill of lading. Thorough bill of lading is all-inclusive Bill of lading which allows for the shipping carrier to pass the cargo through several different distribution centers mostly in case of long ocean routes.<sup>135</sup> Thorough bill of lading is mostly used where the main carrier undertakes to form a portion of the carriage and undertakes an arrangement for the remaining voyage. The main carrier may act as a forwarding agent for the remaining road or rail way carriage.<sup>136</sup>

Unlike multimodal bill of lading, in case of thorough bill of lading, a single mode of transportation to be carried out by two or more different carriers and sub-carriers.<sup>137</sup> A thorough bill of lading is negotiable and is accepted as a document of title. Thorough Bill of lading is recognized under the 1960 Commercial Code of Ethiopia. A carrier who issues a thorough bill of lading shall alone exercise the rights and incur the liabilities arising out of the various stages of transit until the completion of the sea carriage.<sup>138</sup>

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<sup>132</sup> Paul Todd, Principle of Contract of Carriage by Sea, 242.

<sup>133</sup> Ibid.

<sup>134</sup> Ibid.

<sup>135</sup> Paul Todd, Principle of Contract of Carriage by Sea, 245.

<sup>136</sup> Richard Aikens et al, Bill of lading, p, 42, para. 2.76.

<sup>137</sup> Farhang Jafari, The Concerns of the Shipping Industry Regarding the Application of Electronic Bills of Lading in Practice Amid Technological Change, 80.

<sup>138</sup> Maritime Code of the Empire of Ethiopia, Article 204.

#### 2.3.3.4. Multimodal Transport Bill of Lading/ Transport Document

Multimodal transport bill of lading is also known by other names as multimodal transport document, intermodal, combined, house, door-to-door bill of lading. Multimodal bill of lading is used for containerized door-to-door shipments that use different means of transportation from origin to destination.<sup>139</sup> For multimodal bill of lading, unlike the case under through bill of lading, the principal carrier or the freight forwarder takes full liability under a contract of carriage for the entire journey of the cargo by the whole modes of transportation.<sup>140</sup> Multimodal transport bill of lading can be both negotiable and non-negotiable. In Ethiopia legal system, it is regulated under the Ethiopia Multimodal Transports of Goods Proclamation.

#### 2.3.4. Problems of Paper Bill of Lading

Unlike other transport documents like waybills, in case of bill of lading delivery of the goods has to be made only against surrender of the document. Because of this unique feature, bill of lading has dual purposes. First, it protects the interest of holder by keeping the basic term of the contract of carriage that the carrier must only deliver the goods against presentation of bill of lading.<sup>141</sup> Second, the carrier will be relieved from further obligations by delivering the goods against presentation of the bill of lading.<sup>142</sup>

Paper bill of lading by having this unique feature and dual purposes has made the world community for centuries. However, it has some major drawbacks. First of all, the cost of engaging in the business is often high in the case of applying a paper bill of lading and the slow pace of paper transactions makes this cost even higher which is estimated to be 10% of the value of the product.<sup>143</sup>

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<sup>139</sup> Oleg Drobotko, 'Transport Documents in Multimodal Transportations', Mykolas Romeris University, 2010, PP. 4555, p. 53. [Here in after, Drobotko, 'Transport Documents in Multimodal Transportations.'].  
<sup>140</sup> Business dictionary, 'Multimodal Bill of lading', available at < <http://www.businessdictionary.com/definition/multimodal-bill-of-lading-B-L.html> >, [last accessed March 20, 2018].

<sup>141</sup> Wilson, Carriage of Goods by sea p. 154.  
<sup>142</sup> *ibid.*

<sup>143</sup> Farhang Jafari 'The Concerns of the Shipping Industry Regarding the Application of Electronic Bills of Lading in Practice Amid Technological Change', p. 35.

The second problem of paper bill of lading is that there are cases in which bills of lading may arrive after the cargo. There are two main reasons for the late arrival of bill of lading. First, most importantly with commodities trade, the same cargo is often sold many times on the voyage. This problem will be aggravated if the voyage is fairly short and each sale is financed by two banks; which always needs to inspect the documents.<sup>144</sup> However, the bill of lading mostly failed to pass through the hands of a number of traders and their banks in time, even ifers are used instead of mail.<sup>145</sup> The second justification for the late arrival of cargo is materialized because of technological innovations made in ship designs, advances in navigation equipment and an increase in operational efficiency. This innovation and advancements make the ships, the loading and discharging process easy and fast.<sup>146</sup> The advent of multimodal transport further accelerates the pace at which goods are moved. Carriers have established integrated transport systems between themselves and enterprises representing other modes of transport such as rail, road and air. Although the above improvements have resulted in the accelerated arrival of the goods at the endpoint port, the speed at which documents are processed is still sluggish.<sup>147</sup> Delayed arrival of bill of lading is reported by major trading nations such as Belgium, Germany, Greece, Japan and New Zealand as the main problem with the use of traditional paper bills of lading.<sup>148</sup>

The other problem of paper bill of lading is fraud. Trade documentation is prone to fraud by the fact that the documents used are easy to forge despite efforts to the contrary. Today, as anyone can notice, the technology to produce forgeries is becoming better, cheaper and more widely available.<sup>149</sup> Moreover, the documentary process due to its nature of complexity gives fraudsters opportunities to exploit the

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<sup>144</sup>Paul Todd, Principles of the Carriage of Goods by Sea, Taylor and Francis Group, London New York, 2015, p. 360. [Here in after, Paul Todd, Principles of the Carriage of Goods by Sea

<sup>145</sup>Rouhshi Low, Replacing the Paper Bill of lading with an Electronic Bill of lading: Problems and Possible Solutions, International Trade and Business Law, 2000, pp.152-18, p. 163. [ Here in after, Rouhshi Low, Replacing the Paper Bill of lading with an Electronic Bill of lading: Problems and Possible Solutions].

<sup>146</sup>Rouhshi Low, Replacing the Paper Bill of lading with an Electronic Bill of lading: Problems and Possible Solutions, p. 164.

<sup>147</sup>Paul Todd Principles of the Carriage of Goods by Sea, p.360.

<sup>148</sup>Rouhshi Low, Replacing the Paper Bill of lading with an Electronic Bill of lading: Problems and Possible Solutions, p.164.

<sup>149</sup>Ibid.

system.<sup>150</sup> The problem is the fact that victims are mostly from developing countries who are inexperienced buyers with no expertise in international trade. The fraud may be conducted in different ways: among others, the fraudsters may create 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 receiver with the assistance of insiders.<sup>152</sup> In other cases the fraudsters will seek to create genuine bills of lading or other cargo documents, copying corporate styles and logos, and going as far as including genuine ship and shipment details.<sup>153</sup>

### 2.3.5. Solutions for Problem of Paper Bill of Lading

The above shortcomings associated with the use of paper bills of lading oblige the shipping industry to look for mechanisms for the replacement of paper bills of lading. Many options are proposed and employed by the shipping community to address drawbacks of paper bill of lading.

The first solution proposed was to use short form bills of lading.<sup>154</sup> The principal purpose of this action was to simplify documentation and increase the speed of production by reducing the amount of information on bills. It was done by removing the printed terms of the contract of carriage from the reverse side of the bill.<sup>155</sup> Short form bill of lading can be produced in two forms as either by printing the carrier's name at the head or by inserting the name of the selected carrier in the bill by the shipper.<sup>156</sup> The later one is preferred by the commercial community as it is available for universal use and compatible with the need of the shipper to give separate bills fitting to each carrier.<sup>157</sup> Consequently, through this short form bill of lading all functions of bill of lading were achieved. However, doubt was raised

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<sup>150</sup> Sy, Ibrahim, Electronic Bills of Lading: Implications and Benefits for Maritime Transport in Senegal MSc. Thesis, World Maritime University Malmö, [unpublished available at Digital Repository of the world maritime University.], 37.

<sup>151</sup> Ayad H. A. Al-Azzawi, the Crime of International Maritime Fraud: A Comparative Study between Iraqi and English Law PhD Dissertation, University of Glasgow, School of Law, 1998. [Unpublished available online], p.24.

<sup>152</sup> Four Cargo Frauds to watch for at <<https://www.maritimeexecutive.com/article/Cargo-Fraudsto-Watch-Out-For-2014-01-30>> [Last accessed December 30, 2017].

<sup>153</sup> Ibid.

<sup>154</sup> Wilson, Carriage of Goods by Sea Act 1924, s.161.

<sup>155</sup> Ibid.

<sup>156</sup> Ibid.

<sup>157</sup> Ibid., p. 158.

as to whether it fulfils all the requirements of the doctrine of notice resulted in reluctance to use both under the common law and civil law legal system.<sup>158</sup>

Secondly, if the goods are unlikely to be resold while in transit; nonnegotiable sea waybill is proposed and used.<sup>159</sup> In case of sea waybill, the consignee is not required to present the original sea waybill rather mere identification of himself as consignee by any means is sufficient.<sup>160</sup> As a result, the cargo will be released without waiting for the production of the waybill and this reduces the delay of delivery, the possible incidence of loss and damage, the costs of delivery, storage and demurrage and the potential fraud because of stolen and lost documents.<sup>161</sup>

However, still sea waybill cannot replace the very unique and important commercial function of paper bill of lading. First of all, it doesn't give the seller the security of holding a bill of lading simply he has to trust the buyer for payment.<sup>162</sup> It does not also protect the carrier if he delivers to someone not entitled and also not serve as security for banks under documentary credits.<sup>163</sup> Moreover, negotiable bills of lading are advisable when dealing with unknown foreign buyers or sellers, because the parties can finance these transactions and protect their interests, through the use of documentary credit which is impossible in case of sea waybill.<sup>164</sup>

In case of trading commodity cargoes which are vulnerable for repeated negotiation during transit (oil tanker trades and bulk cargoes of grain, ore and coal) and financed by documentary credits; sea waybill cannot be a solution rather a document of title has to be used.<sup>165</sup> Thus, what would be the practical solution? Internationally it has been recognized that electronic bill of lading is the best solution to deal with the problem of paper bill of lading. In order to minimize the problem of fraud in bill of lading,

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<sup>158</sup>Wilson, Carriage of Goods by Sea. 158.

<sup>159</sup> Todd, Principles of the Carriage of Goods by Sea 246 and Wilson, Carriage of Goods by Sea P. 159.

<sup>160</sup> Ibid.

<sup>161</sup> Rouhshi Low, Replacing the Paper Bill of lading with an Electronic Bill of lading: Problems and Possible Solutions, p.165-166.

<sup>162</sup> Todd, Principles of the Carriage of Goods by Sea 246.

<sup>163</sup> Ibid.

<sup>164</sup> David A. Bury, , Electronic Bills of Lading: A Never Ending Story, Tulane Maritime Law Journal 2016, Vol.41, PP. 192-38, at p209. [Here in after, Bury Electronic Bills of Lading: A Never Ending Story]

<sup>165</sup> Ibid.



still an electronic solution is the best alternatives by taking high level security protection. Consequently, the concept of electronic bill of lading is developed.

## 2.4. Electronic Bill of Lading

### 2.4.1. Dematerialization process of Bill of Lading

The advent of technology in the telecommunications sector brought different and faster ways of conducting business transactions at the national and international level. Today, it is normal to see that persons around the corner of the globe can conduct any business transaction in electronic form without having physical contact and without sending and receiving paper documents.<sup>166</sup> An electronic document is an electronic data containing information which is saved in an electronic form in a form of electronic messages sent from one person to another.<sup>167</sup> Here, the original electronic document is the electronic data or message itself and not a print out of the information it contains.<sup>168</sup> As transport documents are one of the most important documents that are used in the international commercial transaction, the business community employed electronic means of communicating those documents

Generally, the dematerialization of electronic transport documents can be achieved through different methods.<sup>169</sup> First of all, after issuing the traditional paper document the parties may agree and deposit the document with a third party electronic service provider. Here, the electronic service provider conducts the administration of the paper document and the trading process of that document will be conducted by electronic messages and electronic communications between the shipper, the consignee, the endorsee, the carrier and the service provider himself.<sup>170</sup> Such types of dematerialization are advantageous by the fact that the law applicable to paper transport document is fully applicable.<sup>171</sup> However, such dematerialization process

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<sup>166</sup>Rouhshi Low, Replacing the Paper Bill of Lading with an Electronic Bill of Lading: Problems and Possible Solutions, p. 166.

<sup>167</sup>ibid.

<sup>168</sup>Raphael Brunner, Electronic Transport Documents and Shipping Practice Not Yet a Married Couple Zurich University, Zurich, 2007. [Unpublished, available at the university electronic Repository], p.20. [Here in after, Brunner, Electronic Transport Documents and Shipping Practice Not Yet a Married Couple]

<sup>169</sup>Brunner, Electronic Transport Documents and Shipping Practice Not Yet a Married Couple, p.21.

<sup>170</sup>ibid.

<sup>171</sup>ibid.

is not suitable for all transport documents. This may be important for transport documents in which the original transport documents are not required for presentation before the carrier. For transport document like bill of lading, such dematerialization process is not helpful.

The second dematerialization option is to substitute the paper transport document and the whole procedures by electronic messages. However, still this system is depending on the third-party registry system. The third party provides the contractual basis and administer the electronic registry system.<sup>172</sup> The third option is a complete dematerialization of transport documents, acting all functions of a traditional paper transport document without the involvement of any third party.<sup>173</sup> The first two are commonly called registry system whereas the third one is referred to as the token system.

#### 2.4.2. Definition of Electronic Bill of Lading

Definition of an electronic document was the focus of scholarly writings for the past three decades.<sup>174</sup> Electronic bill of lading as electronic document is defined by different writings from the very inception of the concept up to today. Generally electronic bill of lading can be defined as electronic counterpart of paper bill of lading. For the purpose of this research, let's look the following two definitions. Richard Aikens and et al. defined electronic bill of lading as "a series of electronic messages, in a form similar to emails, containing information or instructions relevant to the goods concerned and their carriage and delivery, of the same type as in a paper bill."<sup>175</sup> As per this definition electronic bill of lading is series of electronic messages having an equivalent function with paper bill of lading as evidence of a contract of carriage, receipt and document of title.

We cannot find a direct definition of electronic bill of lading under the international convention governing carriage by sea. However, The United Nations Convention on

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<sup>172</sup> Brunner, Electronic Transport Documents and Shipping Practice Not Yet a Married Couple, 2011, p. 21.

<sup>173</sup> Ibid.

<sup>174</sup> Vladimir Savković, "Towards Broader Use of Electronic Bills of Lading in International Transport of Goods: United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea (2009) A New Incentive or an Obstacle?" SEE Law Journal 2014, Vol. 1 No. 1, pp. 85-95. P.86. [Here in after/Vladimir Savković., "Towards Broader Use of Electronic Bills of Lading in International Transport of Goods"]

<sup>175</sup> Richard Aikens et al, Bill of lading, p. 53, para. 118.

Contracts for the International Carriage of Goods Wholly or Partly by Sea electronic transport records defines electronic transport records. As electronic transport record includes all electronic transport documents to be utilized by the marine community, the definition given for electronic transport record is inclusive of electronic bill of lading. Accordingly, electronic transport record is defined as;

information in one or more messages issued by electronic communication under a contract of carriage by a carrier, including information logically associated with the electronic transport record by attachments or otherwise linked to the electronic transport record contemporaneously with or subsequent to its issue by the carrier, so as to become part of the electronic transport record, that evidences the carrier's or a performing party's receipt of goods under a contract of carriage...contains a contract of carriage.<sup>176</sup>

However, this definition is limited to only the two functions of bill of lading as evidence of receipt of goods and contract of carriage. The convention has divided electronic transferable records as negotiable transport records and non-transferable records. Negotiable electronic transport records (electronic negotiable bill of lading) is also recognized and defined as "an electronic transport record [t]hat indicates, by wording such as to order, or negotiable, or other appropriate wording recognized as having the same effect by the law applicable to the record, that the goods have been consigned to the order of the shipper or to the order of the consignee., (Internal quotation omitted). Thus, electronic bill of lading is electronic transport record that can be in negotiable or non-negotiable form and which can perform the function of the traditional bill of lading.

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<sup>176</sup>The Rotterdam Rules, Article 1(18).

## 2.5. Introduction of Electronic Bill of Lading in Ethiopia

Under this part, the researcher addressed the issue related with whether there is an actual need for Ethiopia to introduce an electronic bill of lading or not. In doing so, the researcher used both an interview and documents analysis. Statistically seen, apart from examination and analysis of documentary data and reports, the researcher had interviewed around 9 organizations from government and business communities. To list them, 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 Freight Logistics. The interview collected from those respondents and data 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.

### 2.5.1. Transport Documents Used in Ethiopia Foreign Trade Regime

Principally, foreign trade, import and export of goods to and from Ethiopia can be conducted through the involvement of major modes of transportation systems such as marine, rail, air or road transportation. To do so the respective transport document of every transportation method can be employed. The researcher 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 others are employed under marine and multimodal transport systems. The second one is about the nature of the transport document under usage (negotiable or non-negotiable) and the reason for their choice.

To that end five relevant government and business entities are interviewed and their response is provided as follows. One of the respondents from the business entities stated that the type of marine transport document that they are using is different in

case of export and import.<sup>177</sup> In case of importation, almost all cases, 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. He 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.<sup>178</sup> However, according to him, in case when such types of cases happened, what 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.<sup>179</sup> The other respondent from the Ethiopian Shipping and Logistics Services Enterprise stated that the enterprise employs two types of transport document depending on the mode of transport employed.<sup>180</sup> 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 researcher 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.<sup>181</sup>

Coming to the nature of bill of lading they employed and the reason behind their choice, all of the respondents told me that, in negotiable bill of lading and negotiable multimodal transport document which is practically in use. They

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<sup>177</sup>Interview with Mr. Nigussie Wabella, Senior Shipping Officer at MACCFA Logistics, the Transport Documents used in Ethiopia, April 30, 2018.

<sup>178</sup>Interview with Mr. Nigussie Wabella, Senior Shipping Officer at MACCFA Logistics, on the Transport Documents used in Ethiopia, April 30, 2018

<sup>179</sup>ibid.

<sup>180</sup>Interview with, Mr. Yared Siferaw, Legal, Insurance and Claims Department Director at Ethiopian Shipping and Logistics Services Enterprise, the Transport Documents used in Ethiopia May 7, 2018.

<sup>181</sup>Interview with Mr. Samson Hailu, Operation Manager of Solo International Shipping and Freight Forwarding Agent on the types of transport document used in Ethiopia, May 3, 2018, Interview with Yordanos Serkebirhan, officer, Freighters International (PABOM), the types of transport document used in Ethiopia, May 4, 2018 and interview with Mr. Asaminew Feleke, Senior Banking, Insurance and Clearance Expert at Ethiopian Petroleum Supply Enterprise, the type of Transport documents used, April 30, 2018.

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 necessitated doing so. To start with the commercial factor, in Ethiopia especially in case of import transactions, it is almost a 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 from a bank or an insurance company, it is not allowed to release the cargo from a port by the copy documents. Moreover, the Ethiopia maritime law also obliges the carrier to release cargo after having the original bill only.<sup>182</sup> 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.

## 2.5.2. Factors that Necessitate Introduction of Electronic Bill of Lading in Ethiopia

### 2.5.2.1. 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 at 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<sup>th</sup> of 160 countries surveyed.<sup>183</sup> The World Bank's LPI analyzes countries in six

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<sup>182</sup> Maritime code of the Empire of Ethiopia, Article 187(3).

<sup>183</sup> Logistics performance Index,, available at < <https://logisticsmgpsupv.wordpress.com/2017/04/20/logistics-performance-index/>>, [last accessed March 22,2018].

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.<sup>184</sup> Accordingly, Ethiopia ranked 133, 102, 117, 133 and 149 respectively.<sup>185</sup> This tells us that Ethiopia's performance in 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.<sup>186</sup> 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.<sup>187</sup> The same study also shows that the goods transit time from three ports particularly from India, China and Dubai ports on average was 12 days.<sup>188</sup> Moreover, 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

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<sup>184</sup> €Logistics performance Index,,, available at < <https://logisticsmgpsupv.wordpress.com/2017/04/20/logistics-performance-index/>>, [last accessed March 22,2018].

<sup>185</sup> Ibid.

<sup>186</sup> €OECD Trade Facilitation Indicator Ethiopia,,, at < [http://www.oecd.org/tad/facilitation/Ethiopia\\_OECDTradeFacilitation-Indicator](http://www.oecd.org/tad/facilitation/Ethiopia_OECDTradeFacilitation-Indicator)>, [Last accessed, December 28, 2017].

<sup>187</sup> Ethiopian Revenues and Customs Authority (ERCA) Baseline Survey for Time Release Study (TRS) Final Report, p. 52.

<sup>188</sup> Ibid.

for unimodal through the Ethiopian Shipping and Logistics Services Enterprise and 10 days for the multimodal transportation of goods.<sup>189</sup> 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 is 33 days for unimodal cargoes and 9.5 days for multimodal cargoes.<sup>190</sup>

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 arrive at port of Djibouti before bill of lading reaches to the hand of importers or freight forwarders.<sup>191</sup> 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.<sup>192</sup> 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.<sup>193</sup> 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.<sup>194</sup> 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

<sup>189</sup> Ethiopian Revenues and Customs Authority (ERCA) Baseline Survey for Time and Cost Study (TRS) Final Report, p.53.

<sup>190</sup> *ibid.*

<sup>191</sup> 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 May 7, 2018, Interview with Mr. Nigussie Wabella, Senior Shipping Officer at MACCFA Logistics, on the reason behind lateness of cargo clearance, April 30, 2018, Interview with, Mr. Yared Shiferaw, Legal, Insurance and Claims Department Director at Ethiopian Shipping and Logistics Services Enterprise, on the reasons behind lateness of cargo clearance, May 7, 2018, Interview with Mr. Samson Hailu, Operation Manager of Solo International Shipping and Freight Forwarding Agent, on the practical challenges of paper bill of lading, May 3, 2018, May 4, 2018, Interview with Mr. Asaminew Feleke, Senior Banking, Insurance and Clearance Expert, Ethiopian Petroleum Supply Enterprise on the practical challenges of using paper bill of lading, April 30, 2018.

<sup>192</sup> *ibid.*

<sup>193</sup> *ibid.*

<sup>194</sup> *ibid.*



adverse impact on the gross national economy of the country as there would be an increase of consumption cost.<sup>195</sup> According to the statement of the respondents analysis of documents, the reasons for such late arrival of bill of lading can be attributed to either of the following reasons

#### A. 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.<sup>196</sup> In terms of states, 80% of the import merchandise originates from China, India, Kuwait, Saudi Arabia and the United Arab Emirates.<sup>197</sup> 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.<sup>198</sup> 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? as discussed under the section of this chapter which deals about the problem of paper bill of lading, one of the principal reasons for the early arrival of bill of lading is related to the where about of the port of loading of cargoes.<sup>199</sup> If the distance between the port of loading and the port of discharge is too short, it is obvious that the cargoes arrive before the original paper bill of lading. Consequently, the actual foreign trade flow of a given state determines the lateness 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 at the port. One of the respondents of this research stated that the principal reason for

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<sup>195</sup> Ibid.

<sup>196</sup> National Bank of Ethiopia Annual Report for the year 2014/5, Domestic Economic Analysis and Publication Directorate of National Bank of Ethiopia, 2015, p. 87; National Bank of Ethiopia, Annual Report for the year 2015/6, Domestic Economic Analysis and Publication Directorate of National Bank of Ethiopia, 2016, p. 74-85 and National Bank of Ethiopia, Annual Report for the year 2016/17, Domestic Economic Analysis and Publication Directorate of National Bank of Ethiopia, 2017, p. 464.

<sup>197</sup> Ibid.

<sup>198</sup> Ibid.

<sup>199</sup> Supra p. 32, Chapter Two, section 2.3, sub section 2.3.4.

lateness of bill of lading in their transaction is the fact that around 5 % of the bulk cargoes imported is from Kuwait.<sup>200</sup> 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 cargoes arrive at Djibouti port as it takes more time than the transit time.<sup>201</sup> Even dry cargoes which are imported by Ethiopian Petroleum Supply Enterprises 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 importer.<sup>202</sup>

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.<sup>203</sup> 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.

Sr. N	Item	2017	2016	2015	2014	2013	2012	Rema
1	Grain	1,120,285	2,611,305	1,910,464	1,910,312	1,998,418	1,094,091	4.31
2	Fuel (Oil & gas)	3,900,000	3,378,455	3,138,030	2,906,693	2,056,827	2,300,000	0.00
3	Fertilizer	917,721	844,534	1,036,608	858,606	573,695	1,130,000	1.765
4	Coal	974,542	717,133	500,000	500,000	10,000	0.00	247,451
5	Sugar	163,794	197,946	300,000	280,400	236,835	5.00	227,750
6	Container Multimodal	2,422,824	2,383,796	805,582	2,267,758	36,895	1,030,677	7.00
7	Container Unimodal	845,952	913,373	1,022,711	1,108,175	14,970	1,017,784	4.00
8	Other general Cargo	1,831,276	2,773,608	5,964,078	2,530,070	67,012	52,379	338
	Total	12,175,793	13,820,152	2,332,557	2,271,557	48,384	288,396	6.08

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

In Ethiopia bulk cargoes are imported through unimodal system mainly it is difficult to containerize them, big blow. As stated before the Ethiopian goods port

<sup>200</sup> Interview with Mr. Asamiew Feleke, Senior Banking, Insurance and Clearance Expert at Ethiopian Petroleum Supply Enterprises on the reason for the Lateness of lading, April 30, 2018.

<sup>201</sup> Ibid.

<sup>202</sup> Ibid.

<sup>203</sup> Dry bulk cargoes include grain, fertilizer, sugar, coal whereas liquid cargo, tanker cargoes consist of oil and gas imported to Ethiopia and general cargoes are those cargoes which have different features but can be shipped together like factory machinery and transformers.

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 result there is no choice to use other types of transport document like sea bill of lading 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 research it would be true only by using digitalized 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 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.

#### B. The Nature of Ethiopia's Foreign Trade Payment System

Globally, payment in international trade can be made in four major ways.<sup>204</sup> The First method of payment is advance payment; it is a mode of payment in which the buyer is obliged to pay before the transfer of ownership through telegraphic transfer or credit card system.<sup>205</sup> 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.<sup>206</sup> This type of payment in most jurisdictions is not from the official foreign exchange market and there is also a quantity cap.<sup>207</sup>

The second mode of payment is documentary collection. It is one of the most important methods of payment in the international trade in which payment is to be

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<sup>204</sup>Andres Grath, *The Handbook of International Trade and Finance: The Complete Guide to Risk Management, International Payments and Currency Management, Bonds and Guarantees, Credit Insurance and Trade Finance*, 2<sup>nd</sup> ed., Kogan Page Limited, London, United Kingdom, 2008, p.30. [Here in after, Andres Grath, *The Handbook of International Trade and Finance*

<sup>205</sup>id. p.35.

<sup>206</sup>Welly, Hellen M., Brain MacGregor, *Agricultural Transportation Handbook*, 1<sup>st</sup> ed., United States Department of Agriculture, 2004., p. 40. [Here in after, Welly et al., *Agricultural Transportation Handbook*].

<sup>207</sup>ibid.

made through the seller's and buyer's banks support by forwarding documents to the buyer against payment.<sup>208</sup> 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.<sup>209</sup> 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 latter.<sup>210</sup> 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 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.<sup>211</sup>

Letter of credit is a commitment by a bank on behalf of the buyer to make payment for the seller through the latter bank upon fulfillment of certain conditions which are mostly related to presentation and confirmation of documents.<sup>212</sup> 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 guaranteeing the bank for the obligation it has undertaken on behalf of the buyer.<sup>213</sup> 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.<sup>214</sup>

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

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<sup>208</sup> Andres Grath, *The Hand Book of International Trade and Finance*, p. 42.

<sup>209</sup> *Id.*, p. 44.

<sup>210</sup> *Ibid.*

<sup>211</sup> Dotsey Nelson Monday, Dr. Maindson Kweku Benn & Dr. David Adkah, 'Perspective on International Trade and Payment System', *International Journal of Research*, 2016, Vol 1, Issue 6, Pp 21-31, at p. 28. [ Herein after Nelson Monday et al, *Perspective on International Trade and Payment System*

<sup>212</sup> Nelson Monday et al, *Perspective on International Trade and Payment System*, p. 29.

<sup>213</sup> Andres Grath, *The Hand Book of International Trade and Finance*, p. 49.

<sup>214</sup> Welly et al., *Agricultural Transportation Handbook*, p. 42.

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 and 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.<sup>215</sup> Besides, payment for export can be made either on basis of letter of credit, cash against documents (documentary collection), advance payment and consignment.<sup>216</sup> 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.<sup>217</sup> 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 Mr. Yared shiferaw, 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 and export transaction has to be conducted through documentary credit system; it is must to issue negotiable bill of lading,"<sup>218</sup> According to him the possibility to use other negotiable transport documents like sea way bill is too minimal.<sup>219</sup>

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<sup>215</sup> Directive to Transfer NBE's Foreign Exchange Functions to Commercial Banks, National Bank of Ethiopia, Directive No. FXD/07/1998, 31 August 1998, Article 5(1), (3) and (4). [ Here in after, Directive to Transfer NBE's Foreign Exchange Functions to Commercial Banks

<sup>216</sup> Id., Article 6(1).

<sup>217</sup> Id., Article 5(4).

<sup>218</sup> Interview with Mr. Yared Shiferaw, Legal Insurance and Claims Department Director at Ethiopian Shipping and Logistics Services Enterprise, the Reason Behind the Most Prevalent Usage of Bill of lading, May 7, 2018.

<sup>219</sup> Ibid.

Moreover, Mr. Anteneh Girma 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.<sup>220</sup> To conclude, the role of bill of lading in documentary credit payment system has caused a setback on the cargo clearance and logistics performance of Ethiopia; but only without losing its function as a document of title.

## 2.5.22. 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 bill of lading mostly on the description of goods. The discrepancy may be known at different stages 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. 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.<sup>221</sup>

For the first scenario of discrepancy, by the custom of mercantile law, 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.<sup>222</sup> In case of the later scenario amendment of the description of goods can be made only after the buyer has received the discrepancy 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.<sup>223</sup> This amendment process will take time and this in effect increase the dwelling time of cargo at the port of delivery which in turn increase cost of the shipment.

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<sup>220</sup>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, May 4, 2018.

<sup>221</sup>Ajay Phthak, Export Import Management, 1<sup>st</sup> ed., Education Publishing, India, p. 95. [ Herein after, Ajay Phthak, Export Import Management ]

<sup>222</sup>ibid.

<sup>223</sup>id., p. 96

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.<sup>224</sup> This cannot be avoided notwithstanding that the parties gave 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.<sup>225</sup> 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.<sup>226</sup> 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 Ethiopia, all of the respondents who participated in this study reported that loss or mistake on the particular 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.<sup>227</sup> 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 of 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.<sup>228</sup> „[emphasis added]€.

Another respondent from MACCFA Freight 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

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<sup>224</sup> Ajay Phthak, Export Import Management, p. 94.

<sup>225</sup> Ibid.

<sup>226</sup> Ibid.

<sup>227</sup> Interview with Mr. Samson Hailu, Operation Manager of Solo International Shipping and Freight Forwarding Agent on the Practical Challenge of Paper Bill of lading, May 3, 2018.

<sup>228</sup> Ibid.

issuance; which in effect takes additional weeks to have it again, 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.<sup>229</sup> 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.<sup>230</sup>

The above assessment shows that loss and discrepancy of lading are actually happening here in Ethiopia likewise what is going on in another world.

### 2.5.2.3. 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 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, the carrying vessel named in the bill may not even exist.<sup>231</sup>

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. 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

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<sup>229</sup> Interview with Mr. Nigussie Wabellla, Senior shipping officer at MACCFA Freight Logistics on the Practical Challenge of Paper Bill of lading, April 30, 2018.

<sup>230</sup> Interview with Mr. Melaku Mekonnen, Manager of Legal Service Division at Ethiopian Shipping and Logistics Services Enterprise on the Practical Challenge of Paper Bill of lading, May 7, 2018.

<sup>231</sup> Interview with Mr. Anteneh Girma, Manager of Trade Service Deal Processing Unit at Commercial Bank of Ethiopia on the Practical Challenge of Paper Bill of lading, May 4, 2018

<sup>232</sup> Supra p.24, Chapter Two, section 2.3, sub section 2.3.2.3.

<sup>233</sup> Susmitha P Mallaya, Documentary Credit Law: An Indian Perspective, PhD Dissertation, School of Legal Studies Cochin University of Science and Technology, 2007, [unpublished available at the University Repository], p. 140. [ Herein after, Susmitha P Mallaya, Documentary Credit Law: An Indian Perspective]

<sup>234</sup> Id., p.141.



receiver.<sup>235</sup> This type of frauds 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 forged 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 of technological instruments to make fraud on the paper.

Studies show that developing countries are the main target of documentary fraudsters.<sup>236</sup> 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 one. 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 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. He stated the seriousness of the problem as follows.

As a shipping line, we have experienced a lot of real cases relating to forged 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 cargo 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 bill of lading and the enterprise always tries its own best to check the document.

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<sup>235</sup> Cargo Frauds to Watch Out for <https://www.maritimeexecutive.com/article/CargoFrauds-to-Watch-Out-For-201401-30#gs.bdKdlqA> [last accessed on April 22, 2018].

<sup>236</sup> Ayad H. A. Al-Azzawi, The Crime of International Maritime Fraud: A Comparative Study between Iraqi and English Law, PhD Dissertation, The School of Law, Faculty of Law and Financial Studies University of Glasgow, 1998, unpublished available at the University Repository 24. [Herein after, Al-Azzawi, The Crime of International Maritime Fraud: A Comparative Study between Iraqi and English Law]. Besides, the International Maritime Bureau's analyses also show that documentary fraud aimed at buyers in developing countries mostly those from the Middle East and Africa.

<sup>237</sup> Interview with Mr. Melaku Mekonnen, Manager of Legal Service Division at Ethiopian Shipping and Logistics Services Enterprise, the Practical Challenge of Paper Bill of lading, May 7, 2018

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 explained to how Ethiopian Shipping and Logistics Service Enterprise bill of lading is vulnerable to forgery. He stated that most traders in Ethiopia know that the main purpose of 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 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.<sup>238</sup> He also added that the technological development makes everything easy to print out forged bill of lading as it is original.<sup>239</sup>

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 worth around 7,000, 000 Ethiopian Birr.<sup>240</sup> The Ethiopian Shipping and Logistics Service Enterprise through its agent has issued bill of lading for the South Korean car dealer at the port of loading there in South Korea.<sup>241</sup> However, another trader in Ethiopia who has not an actual contract with South Korean car dealer came 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 fraudulent South Korean car dealer informed the Ethiopian shipping line that it has not yet sent the original bill of lading to Mr. X.

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<sup>238</sup> Interview with Mr. Melaku Mekonnen, Manager of Legal Service Division at Ethiopian Shipping and Logistics Services Enterprise, on the Practical Challenge of Paper Bill of lading, May 7, 2018

<sup>239</sup> Ibid.

<sup>240</sup> Interview with Mr. Melaku Mekonnen, Manager of Legal Service Division at Ethiopian Shipping and Logistics Services Enterprise, on the Practical Challenge of Paper Bill of lading, May 7, 2018

<sup>241</sup> Ibid.

### 2.5.3. 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 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 application of electronic bill of lading.

Emanuel T. Laryea, a well-known scholar in the area of paperless international trade, has identified the minimum technological threshold that needed to operate paperless international trade.<sup>242</sup> 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.<sup>243</sup> 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.<sup>244</sup> 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 porters, 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 21<sup>st</sup> century, developing countries including least developing countries shows great improvement

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<sup>242</sup> Emmanuel T. Laryea, The Technological Challenges Facing Developing Countries in the Move to Paperless International Trade, *Bond Law Review*, Volume 11, Issue 2, 1999, p.280.

<sup>243</sup> *ibid.*

<sup>244</sup> *Id.*, p. 281.

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.<sup>245</sup> 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.<sup>246</sup> 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 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 2014.<sup>247</sup> 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 entities through single electronic window system. The project has 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, 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 supports electronic systems between the government agencies and other stakeholders of international trade.

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<sup>245</sup> In recent times across the country especially the technology of mobile and internet is flourishing. The report of science and technology shows that there are around 56,899,089 users of telecommunication service.

<sup>246</sup> Interview with Anonymous Respondent from Ethiopian Single window Project on the Technological readiness of Ethiopia for Introducing Electronic Bidding, May 04, 2018.

<sup>247</sup> Ibid.

Coming to the readiness of Ethiopia's banks according to Mr. Yared Shiferaw, 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.<sup>248</sup> Unlike other sectors, the banking sector has gone a lot in delivering electronic services.<sup>249</sup> The writer of this research believes that as far as there is a 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 Kiflemariam, 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.<sup>250</sup> 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.

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<sup>248</sup> Interview with Mr. Yared Shiferaw, Legal, Insurance and Claims Department Director at Ethiopian Shipping and Logistics Services Enterprise, on the challenges of electronic bill of lading, May 07, 2018.

<sup>249</sup> *Ibid.*

<sup>250</sup> Interview with Mr. Elias Kiflemariam, An Expert of Ethiopian Customs Clearance Project of ERCA, on the Challenges of Electronic Bill of lading, May 03, 2018.

# CHAPTER THREE: LEGAL ISSUES OF ELECTRONIC BILL OF LADING AND ANALYSIS OF THE ETHIOPIAN LEGAL ENVIRONMENT

## 3.1. Legal Issues of Electronic Bill of Lading

### 3.1.1. Introduction

Although there is a shift towards using other negotiable transport documents than the traditional bill of lading because of the drawbacks of the latter, the importance of bill of lading still wins out as a best marine transport document for the sake of having the advantage of its negotiability. However, this glorified and unique transport document can only be revitalized if it can be made competitive in this commercial world with other negotiable marine transport documents by having both its unique feature of being negotiable and its recognition as a document of title.<sup>252</sup>

Today the international business community tends towards using this historical and unique marine transport document in the electronic format. However, the usage of electronic bill of lading is not as easy as the paper bill of lading as its application faces both technological and legal challenges. As per one study conducted by United Nations Conference on Trade and Development on identifying the obstacles that discourage the use of electronic transport documents, it is the legal uncertainty that takes the upper hand even above the costs of setting up an electronic environment and any associated confidentiality concerns.<sup>253</sup> Moreover, many legal scholars agreed that technology was not the real and the major challenge rather it is the orthodox belief of the legal community by sticking to the legal principle that a document of title can only be issued and transferred in paper form.<sup>254</sup> In terms of technology because of the innovation and flourishing of computer technology, the

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<sup>251</sup>Farhang Jafari, The Concerns of the Shipping Industry Regarding the Application of Electronic Bills of Lading in Practice Amid Technological Change

<sup>252</sup>Id., p. 250.

<sup>253</sup>UNCTAD, The use of Transport Documents in international Trade 2003, (UNCTAD/SDTE/TLB/2003/3) para 79

<sup>254</sup>Ibrahim, Electronic Bills of Lading Implications and Benefits for Maritime Transport in Senegal p.2-3.

international business community developed electronic bill of lading which actually outdoes all features of paper bills of lading.<sup>255</sup>

As a matter of fact, unlike sales contract, contract of carriage is subject to detail regulation of law. Thus, national as well as the international legal instruments have a vital role in the regulation of the overall application of transport documents. However, in case of electronic transport document especially electronic bill of lading there is uncertainty which challenges the application and validity of electronic bill of lading.<sup>256</sup> Consequently parties to the international business transaction would become suspicious of the application of electronic bill of lading if there is uncertainty as to the validity or effectiveness of an electronic bill of lading.

Knowing this, United Nations as well as national states come up with two possible legislative approaches to enable the use of electronic transferable records generally and electronic bill of lading specifically. The first approach is to create a purely electronic regime on electronic bill of lading which has no paper-based counterpart. According to this approach, the empowering legislation shall have all the substantive rules concerning the rights, obligations and characteristics of the purely electronic bill of lading.<sup>257</sup> This approach is called substantive approach. So far, this approach is employed by the Rotterdam Rules while defining electronic transport records.

The second approach is called functional equivalence approach. According to this approach, functional equivalence rules have to be set only for electronic functional equivalents of paper-based requirements.<sup>258</sup> The second approach does not intend to affect the substantive law relating to the paper-based electronic bill of lading rather it only addresses hurdles to the use of the electronic form that are there because of paper-based form requirements stated under the existing law.<sup>259</sup> The functional approach excludes those transferable records which only exist in the electronic

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<sup>255</sup> W.H. van Boom, Certain Legal Aspects of Electronic Bills of Lading, European Transport Law, 1997, Volume 32, No. 1, p. 924, p.1. [Here in after, van Boom, Certain Legal Aspects of Electronic Bills of Lading]

<sup>256</sup> Ibrahim, Electronic Bills of Lading: Implications and Benefits for Maritime Transport in Senegal p.2-3.

<sup>257</sup> Zvonimir Jafranko, The Notion of Electronic Transferable Records, Intereulaweast 2016, Vol. III, No. 2, p. 14. [Here in after Zvonimir Jafranko, The Notion of Electronic Transferable Records]

<sup>258</sup> Id., p.7-9.

<sup>259</sup> Id. p.14.

environment or which could develop in future exclusively as electronic records.<sup>260</sup> The functional approach is currently accepted and employed by majority of states which enacted electronic transaction laws. Besides, Model Laws, guidelines and convention enacted by international institutions have also followed the second approach with the exception of the Rotterdam Rules. The first approach is no more in use since the actual tendency and practice at the global level is towards adopting the functional approach. Legal issues regarding the regulation of electronic bill of lading mainly revolve around addressing functional equivalents of paperbased requirement; among others, it includes permanent accessibility to the information, ability to preserve the original information, uniqueness, transferability, ability to identify the holder and the ability to authenticate the issuer.<sup>261</sup>

### 3.1.2. Writing (Document) and Signature Requirement

The substantive law regulating transport document may require that lading should be made in a written document. The functional equivalent electronic transport document should in such cases fulfil the legal requirement of writing or document in order to make the record or the transaction valid and enforceable. When we come to the case of bill of lading, by mercantile custom it has been used in the international business transaction in the form of a written document.<sup>262</sup> However, we cannot find an express stipulation either under The Hague-Visby or the Hamburg Rules about a requirement that bill of lading has to be in writing. Let's start with the Hamburg Rules, it states that bill of lading is a "document".<sup>264</sup> Whether the term document includes an electronically generated and maintained bill of lading or not;

<sup>260</sup> Joint IMDA-AGC Review of the Electronic Transactions Act (cap. 88): Review of a UNCITRAL Model Law on Electronic Transferable Records, available at < [https://www.imda.gov.sg/media/imda/files/inner/pcdg/consultations/consultationpaper/publicconsultationpaper--uncitral-model-law-on-etrs\\_10march2017.pdf?la=en](https://www.imda.gov.sg/media/imda/files/inner/pcdg/consultations/consultationpaper/publicconsultationpaper--uncitral-model-law-on-etrs_10march2017.pdf?la=en), [last accessed February 20, 2018].

<sup>261</sup> Zvonimir Jafanko, The Notion of Electronic Transferable records 7-9.

<sup>262</sup> Luis E. Nova, Electronic data interchange: Its Benefits in Trade Activities for Developing Countries MA thesis, World Maritime University 1999. [Unpublished, available at Digital Repository of the World Maritime University], p.15. Here in after Luis E. Nova, Electronic data interchange: Its Benefits in Trade Activities for Developing Countries

<sup>263</sup> Krailerk Euarjai, International Carriage of Goods by Sea: Problems in Bills of Lading and Their Impact in Australia and its Major Trading Partners in Asia, L.M Thesis, University of Tasmania, 1999. [Unpublished, available at Digital Repository of University of Tasmania], p.187. [Here in after Krailerk Euarjai, International Carriage of Goods by Sea: Problems in Bills of Lading and Their Impact in Australia and its Major Trading Partners in Asia]. See also, Luis E. Nova, Electronic data interchange: Its Benefits in Trade Activities for Developing Countries 15.

<sup>264</sup> The United Nations Convention on the Carriage of Goods by Sea, 1978 (Hamburg Rules), Article 1(7). [Herein after Hamburg Rules]



is not clear. Besides, the term writing is defined by having illustrative list. Therefore, it is possible to argue that electronic bill of lading is recognized as document under the Hamburg convention.

Coming to The Hague Visby Rules, there is no definition of bill of lading. However, The Hague Visby Rules do not expressly specify that bill of lading must be written on paper rather it only specifies that the carrier has to issue<sup>265</sup> a bill of lading when requested by the consignor.<sup>266</sup> What does to mean issue? Is that to refer writing and document? It is not cleared. As a result, state courts tried to interpret the word like writing, document issue in different ways while the question of functional equivalence raised. Some state courts interpreted it in an orthodox way as others interpreted it by employing a purposive approach to have media neutral application of those instruments.<sup>267</sup> Therefore, the fact that there are such difficulties while applying electronic bill of lading, the law has to have a say for the functional equivalent application of electronic bill of lading.

The other legal issue that needs a solution is the reliability and validity of an electronic signature. Signature is mostly regarded as the very important requirement for the authentication of every document used in business as well as government activities.<sup>268</sup> It is practically known that a document which holds rights and obligation to be accepted in the court of law must be authenticated by the parties and mostly it is done by having the signature of the parties.<sup>269</sup> In this regard Johnson while appreciating the importance of signature stated that signature has four main functions:-

- (1) To identify a piece as having originated from a particular person, bearing in mind that no two signatures are the same.
- (2) To show the agreement of the person signing to the contents of the document to be signed.

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<sup>265</sup> International Convention for the Unification of Certain Rules of Law relating to Bills of Lading ("Hague Rules"), and Protocol of Signature, 1924, Article 3(3). [ Here in after, Hague Visby Rules].

<sup>266</sup> Brunner, Electronic Transport Documents and Shipping are Not Yet a Married Couple. 25. see also Willem H. Van Boom, Certain Legal Aspects of Electronic Bills of Lading, pp. 13-14 and Rouhshi Low, Replacing the Paper Bill of lading with an Electronic Bill of lading: Problems and Possible Solutions, p. 193.

<sup>267</sup> Willem H. Van Boom, Certain Legal Aspects of Electronic Bills of Lading, pp. 15.

<sup>268</sup> *ibid.*

<sup>269</sup> Samantha Peet, The Development of the Bill of lading: Its Future in the Maritime Industry, p. 235

(3) To show that the person signing realizes that the document is formal and that he intends to be bound by it.

(4) To show that the document is an original.<sup>270</sup>

This shows that how much signature is the most important legal requirement for the admission and validity of a given document. International business transactions require the transfer of documents with the shipment as proof of the quantity and quality of the shipment and hence, authentication is given priority. It is seldom to find laws of a bill of lading which provided signature requirement as validity requirement for bill of lading.<sup>271</sup> However, by mercantile customary usage the requirement of signature is required as validity requirement for bill of lading.<sup>272</sup> The mercantile practice tells that the signature might not always be made in-hand written, there are bill of lading signed either by a facsimile or rubber stamp.<sup>273</sup> This shows that the mercantile practice is open for accommodating any method of signature. Before the coming of electronic data interchange and electronic signature, there was no actual problem regarding the means of signature employed by the parties.<sup>274</sup>

In the Hague-Visby Rules which in one way or other way influenced most national states law regulating bill of lading, there is no any provision which requires that bill of lading has to be signed by the parties. However, article 14(2) of Hamburg Rules provide that bill of lading has to be signed by a person having the authority to do so. It also stated that "the signature on bill of lading may be in handwriting, printed in facsimile, perforated, stamped, in symbols, or made by any other mechanical or electronic means if not inconsistent with the law of the country where the bill of lading is issued."<sup>275</sup> However, by the fact that most national laws are crafted in light of the Hague-Visby rules, it is seldom to have such provision under national laws. The business community wants to become certain as to whether the courts accept an electronic form of authentication as a signature or not. This has to

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<sup>270</sup> Johnson C. Electronic Data Interchange and Negotiable Instruments - a preliminary Review of some Legal Issues, International Yearbook of Law Computers and Technology, 1992, p. 10, as cited by Samantha Peel, The Development of Bill of lading: Its Future in the Maritime Industry, p. 236

<sup>271</sup> Samantha Peel, The Development of the Bill of lading: Its Future in the Maritime Industry, p. 235

<sup>272</sup> Ibid.

<sup>273</sup> Ibid.

<sup>274</sup> Ibid.

<sup>275</sup> Hamburg Rules, Article 14(3).

be done through the instrument of law by legislating the functional equivalent of hand signature.

### 3.1.3. Uniqueness and Guaranty of Singularity

The very function of transferable documents is that they embody rights which represents the actual rights and obligations of the transaction. Paper-based transferable documents due to their material nature are characterized by uniqueness.<sup>276</sup> Here, a paper bill of lading required to be in a single and original unique document that represents the rights embodied in such transferable paper; which in turn guarantees the singularity of these rights and liabilities.<sup>277</sup> Any negotiation or assignment of such rights by the holder requires the physical delivery of the singular and original bill of lading.<sup>278</sup> Therefore, in case of a paper bill of lading its singularity and uniqueness can be kept by having and transferring the original document as between all the parties which are participating in the transaction.

When we come to the case of electronic bill of lading, it requires more strict legal and technical requirement to guarantee uniqueness or singularity of the document as an electronic record can be copied in a way that generates a duplicate identical to and indistinguishable from the first one.<sup>279</sup> As per the report of UNCITRAL working group on electronic commerce, "if a person is to receive possessory title of a transferable instrument or a document of title by receiving it as an electronic message, the addressee will need to be satisfied that no identical message could have been sent to any other person by any preceding party in the chain."<sup>280</sup>

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<sup>276</sup> Zvonimir Jafanko, The Notion of Electronic Transferable records, p. 18.

<sup>277</sup> Joint IMDA-AGC Review of the Electronic Transactions Act (cap. 88): Review of Draft UNCITRAL Model Law on Electronic Transferable Records,, available at < [https://www.imda.gov.sg/media/imda/files/inner/pcdg/consultations/consultationpaper/publicconsultationpaper--uncitral-model-law-on-etr\\_10march2017.pdf?la=en](https://www.imda.gov.sg/media/imda/files/inner/pcdg/consultations/consultationpaper/publicconsultationpaper--uncitral-model-law-on-etr_10march2017.pdf?la=en) >, [last accessed February 20, 2018].

<sup>278</sup> *ibid.*

<sup>279</sup> Joint IMDA-AGC Review of the Electronic Transactions Act (cap. 88): Review of Draft UNCITRAL Model Law on Electronic Transferable Records,, available at < [https://www.imda.gov.sg/media/imda/files/inner/pcdg/consultations/consultationpaper/publicconsultationpaper--uncitral-model-law-on-etr\\_10march2017.pdf?la=en](https://www.imda.gov.sg/media/imda/files/inner/pcdg/consultations/consultationpaper/publicconsultationpaper--uncitral-model-law-on-etr_10march2017.pdf?la=en) >, [last accessed February 20, 2018]

<sup>280</sup> United Nations Commission on International Trade Law Working Group on Legal Issues Relating to the Use of Electronic Transferable Records, Notes by secretariat, 2011, p. 5, para.13. [Available at <https://documents.un.org/doc/UNDOC/LTD/V11/855/64/PDF/V1185564.pdf?OpenElement>

In terms of technology, today it is possible to guarantee the uniqueness and singularity of a given electronic transferable record by employing two means.<sup>281</sup>

The first one is by using a central registry administered by a trusted intermediary. Nevertheless, to make transactions on central registry system, all parties of the given transaction must be registered members. However, when a non-member later on becomes part of the transaction an electronic bill of lading needs to be replaced by a paper bill of lading.<sup>282</sup> Later on, thanks to the invention of block chain technology, it is possible to guarantee the uniqueness or singularity of electronic transferable record by simple circulation of the token in an open and decentralized platform.<sup>283</sup> In case of block chain technology, the transaction of electronic bill of lading can be taken place peer-to-peer on an open platform where no prior subscription to membership is required.<sup>284</sup> This very characteristics of the token system can warrant worldwide reach of the participants by the fact the application of bill of lading involves the participation of enterprises from many business parties like trader themselves, banks, carriers, freight forwarders, government bodies.<sup>285</sup> Therefore, in terms of technology now it is possible to use either the registry or token system.

However, both system would not work unless it is given sufficient support from the legal infrastructure to keep the singularity or uniqueness of electronic bill of lading. Therefore, there should be a means to prevent unauthorized replication of an electronic transferable bill of lading by the electronic system and it is normal to be done by providing legal requirements though it may also be possible by providing technical requirements.

Besides, the paper bill of lading shall be presented or retained in its original form. Here, there should be legal requirements which allows electronic documents to be presented or retained in their original form.

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[ Here in after, UNCITRAL, Legal Issues Relating to the Use of Electronic Transferable Records (2011), A/CN.9/WG. IV/WP.115]

<sup>281</sup> Koji Takahashi, Block chain Technology and Electronic Bills of Lading, The Journal of International Maritime Law 2016, Volume 22, pp. 200-211, at p. 204. [Here in after, Koji Takahashi, Block chain Technology and Electronic Bills of Lading]

<sup>282</sup> Id. p. 205.

<sup>283</sup> Koji Takahashi, Block chain Technology and Electronic Bills of Lading, p. 204.

<sup>284</sup> Id., p. 205.

<sup>285</sup> Id., p. 206.

### 3.1.4. Physical Possession and Transfer of Rights by Delivery

Transfer of a right and its performance embodied in a paper-based negotiable document can be achieved with the transfer of the actual or constructive possession over that document.<sup>286</sup> Any right to claim the performance cannot be detached from the physical paper. The person who physically owns the document is supposed to be the person who is titled to claim the right. Thus, mere physical submission of a document is a formal requirement for acquiring the right to be incorporated in the document.<sup>287</sup>

However, in case of electronic bill of lading, the concept of actual or constructive possession does not work as there is no actual document to be transferred through this method. Therefore, there should be a means to have the possession of the right embodied on the electronic bill of lading. Physical possession is substituted by control in a case of electronic bill of lading. Generally, the system to transfer the rights and performance of electronic bill of lading to another person is called control.<sup>288</sup> Hence, the transfer of electronic document generally and electronic bill of lading particularly can be done with the transfer of control over the electronic transferable record.<sup>289</sup> Here, the person with control of the electronic bill of lading is considered the holder capable of enforcing the electronic bill of lading. Thus, if control of an electronic bill of lading is used as a substitute for physical possession of paper-based document, transfer of control serves as the substitute for delivery of an electronic bill of lading as delivery and subsequent endorsement used as transfer of a paper-based document.<sup>290</sup>

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<sup>286</sup> United Nations Commission on International Trade Law, Legal Issues Relating to the use of Electronic Transferable Records, 2012, p.13, para.51. [Available at <https://documents.un.org/doc/UNDOC/LTD/V12/559/17/PDF/V1255917.pdf?OpenElement>] Here in after, UNCITRAL, Legal Issues Relating to the use of Electronic Transferable Records, A/CN.9/WG. IV/WP.118.]

<sup>287</sup> Zvonimir Jafranko, The Notion of Electronic Transferable records, p.18.

<sup>288</sup> Id., p.5.

<sup>289</sup> UNCITRAL, Legal Issues Relating to the Use of Electronic Transferable Records, A/CN.9/WG. IV/WP.118 p. 12 para.43.

<sup>290</sup> United Nations Commission on International Trade Law, Legal Issues Relating to the use of Electronic Transferable Records: Proposal by the Governments of Colombia, Spain and the United States, 2012, pp.1011, para.38. [ Available at <https://documents.un.org/doc/UNDOC/LTD/V12/552/61/PDF/V1255261.pdf?OpenElement>] UNCITRAL, Legal Issues Relating to the use of Electronic Transferable Records: Proposal by the Governments of Colombia, Spain and the United States, (2012), A/CN.9/WG. IV/WP.119.

Control and transfer rights of an electronic record can be made by either the registry system or token system.<sup>291</sup> In case of the registry system, as the identity of the owner of the electronic bill of lading is found in a separate independent registry system, control is to be made on the registry system.<sup>292</sup> Here, what is required is to make the integrity of the registry system. In case of token system, the fact that the identity of the holder of electronic bill of lading is found in the electronic bill of lading itself may not be a such problematic.<sup>293</sup> Besides, any changes in the ownership of the rights can be known by alterations made directly to the electronic record.<sup>294</sup> Thus, to maintain the integrity, there should be control over the electronic record itself and the process for transfers of the bill. It is by the instrument of the law that the use of electronic bill of lading through control over that record can be enabled.

### 3.1.5. Identification, Authorization and Authentication of Holder and Issuer

Identification and authentication of issuer and holder have double fold benefits. It allows the exercise of control and verifies the validity of the chain of transfers of the electronic transferable record (bill of lading).<sup>295</sup> The identity of the issuer who signs the original electronic bill of lading and of the transferor who endorses the electronic bill of lading to transfer it to another party is required to have a valid electronic signature.<sup>296</sup> Identification of the holder of electronic bill of lading is very important to know the creditor and the beneficiary of the bill of lading. As a matter of fact, the identity of the holder may not be known from the electronic record; as there is a possibility to be changed from time to time.<sup>297</sup>

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<sup>291</sup> UNCITRAL, Legal Issues Relating to the use of Electronic Transferable Records: Proposal by the Governments of Colombia, Spain and the United States (2012), A/CN.9/WG. IV/WP.119 para.39.

<sup>292</sup> UNCITRAL, Legal Issues Relating to the Use of Electronic Transferable Records (2011), A/CN.9/WG. IV/WP.115 p.7, para.22.

<sup>293</sup> UNCITRAL, Legal Issues Relating to the use of Electronic Transferable Records: Proposal by the Governments of Colombia, Spain and the United States (2012), A/CN.9/WG. IV/WP.119, p. 11, para.41

<sup>294</sup> *ibid.*

<sup>295</sup> United Nations Commission on International Trade Law, Legal Issues relating to the Use of Electronic Transferable records (continued), Notes by Secretariat, 2013, p.4, para.16. [Available at <https://documents.un.org/doc/UNDOC/LTD/V12/559/11/PDF/V1255911.pdf?OpenElement>]. [Here in after, UNCITRAL, Legal Issues Relating to the Use of Electronic Transferable Records (continued) 92012), A/CN.9/WG.IV/WP.118/Add.1.

<sup>296</sup> UNCITRAL, Legal Issues Relating to the Use of Electronic Transferable Records (2011), A/CN.9/WG. IV/WP.115 p.8., para.25.

<sup>297</sup> *Id.*, p.8., para. 26.

In case of paper bill of lading, the person in possession of the unique negotiable bill of lading is presumed to be the holder.<sup>298</sup> However, in case of electronic bill of lading, as the physical possession is to be substituted by control of electronic bill of lading, the law has to come up with a mechanism to identify the person who is going to be considered as the holder of bill of lading at any time.

### 3.1.6. Evidential Value of Electronic Bill of Lading

As addressed under chapter two of this thesis, bill of lading has a function of being an evidence for receipt of goods and contract of carriage.<sup>299</sup> As a receipt, the paper bill of lading evidences the quantity, condition (quality) and loading marks of the goods.<sup>300</sup> As evidence of a contract of carriage, the paper bill of lading evidences the existence of the contract between the carrier and shipper. This shows that how much the evidential value of bill of lading has to be given emphasis; as two of its basic functions is about evidence and evidence.

Electronic bill of lading is equally capable of describing the goods and contracts in the same way. In case of a paper bill of lading, the paper itself can be brought before a court of law as an evidence for receipt and contract of carriage. However, when we come to the case of electronic bill of lading, there is uncertainty as to whether it is admissible before the court of law or not. Most procedural rules dealing with the admissibility of evidence are crafted by taking the admissibility of paper based documentation into consideration.<sup>301</sup>

However, though those laws are crafted by taking into consideration such paper documents, theoretically both under the common law and civil law legal system, there is a possibility for the admission of electronic bill of lading as evidence before a court of law.<sup>302</sup> Under the common law legal system, both documents and

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<sup>298</sup> UNCITRAL, Legal Issues Relating to the Use of Electronic Transferable Record (2011), A/CN.9/WG. IV/WP.115 p.8., para 25.

<sup>299</sup> Supra pp. 21-23, chapter two, section, 2.3.2., sub section 2.3.2.1 and 2.3.2.2.

<sup>300</sup> Samantha Peet, The Development of the Bill of lading: Its Future in the Maritime Industry p.239.

<sup>301</sup> Rouhshi Low, Replacing the Paper Bill of lading with an Electronic Bill of lading: Problems and Possible Solutions, p.197.

<sup>302</sup> Krailerk Euarjai, International Carriage of Goods by Sea: Problems in Bills of Lading and Their Impact in Australia and its Major Trading Partners in Asia 190, Rouhshi Low, Replacing the Paper Bill of lading with an Electronic Bill of lading: Problems and Possible Solutions, p.209 and Farhang Jafari, The Concerns of the Shipping Industry Regarding the Application of Electronic Bills of Lading in Practice Amid Technological Change, p.214-215.

computer records are grouped as hearsay evidence<sup>303</sup> Hence, an electronic bill of lading could satisfy the best evidence rule of common law legal system and could be accepted as evidence as far as there is no available evidence<sup>304</sup> In the case of the civil law legal system, there is a principle that all material evidence can be admissible to establish the material truth.<sup>305</sup> But, it does not mean that electronic records are always admissible before a court of law under every legal system as there is the possibility to prohibit such admission. Today, in most jurisdictions; as they are aware of the influence of technology in a day to day business transaction; electronic records are recognized as evidence.

### 3.1.7. Issues Related to Amendment of Electronic Bill of lading

Once an electronic bill of lading is issued, later on, that electronic record may be subject to amendment or correction. This may be done for different reasons among others transfer, correction, subrogation, succession, splitting and combining of the record.<sup>306</sup> For different reasons errors may occur on a given electronic bill of lading while it is issued or later on. To mention, the information provided by the requesting party may be different from what is actually recorded under the electronic bill of lading if there is an issuance of electronic records without a request, if there is omission of details to be recorded and incorrect early termination of the electronic record.<sup>307</sup> Besides, electronic bill of lading may be split or combined for different reasons; for instance, a given electronic bill of lading may be split for partial performance.<sup>308</sup> These all issues have to be addressed through contractual or legislative actions.

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<sup>303</sup> Krailerk Euarjai, International Carriage of Goods by Sea: Problems in Bills of Lading and Their Impact in Australia and its Major Trading Partners in Asia, 190, Rouhshi Low, Replacing the Paper Bill of lading with an Electronic Bill of lading: Problems and Possible Solutions, p. 1280 and Farhang Jafari, The Concerns of the Shipping Industry Regarding the Application of Electronic Bills of Lading in Practice Amid Technological Change, 214-215.

<sup>304</sup> Krailerk Euarjai, International Carriage of Goods by Sea: Problems in Bills of Lading and Their Impact in Australia and its Major Trading Partners in Asia, p.191.

<sup>305</sup> Id., p.200.

<sup>306</sup> UNCITRAL, Legal Issues Relating to the Use of Electronic Transferable Records (continued) (2012), A/CN.9/WG.IV/WP.118/Add.1, p.1, para.42.

<sup>307</sup> UNCITRAL, Legal Issues Relating to the Use of Electronic Transferable Records (continued) (2012), A/CN.9/WG.IV/WP.118/Add.1, p.3-6, para.207.

<sup>308</sup> Ibid.



### 3.1.8. Formation of Contract Between the Endorsee and the Carrier

Bill of lading is an evidence for the contract of carriage between the carrier and the shipper; not a contract itself. Therefore, there may not be a problem when the dematerialization issues come, as the contract between the carrier and the shipper is to be governed by a prior written or oral contract not the bill of lading. However, regarding the relationship between the carrier and third party endorsee, it is not merely evidence of contract carriage rather it is a contract itself where the prior contract between the shipper and carrier would not have an effect on the relationship between third parties (banks, buyers or other endorsees) and the carrier. <sup>309</sup> Rather, the terms of a bill of lading will govern the overall relationships as between those endorsees and contracting carrier; thus by default, it is a contract of carriage. <sup>310</sup>

In case of paper bill of lading, the process of formation of contract can be conducted as any documentary contract. However, when bill of lading is dematerialized, there are legal concerns that need to be addressed. The first issue addressed is whether a contract can be validly concluded between parties using electronic data and interchange method or not; mostly by the general obligation law. Secondly, the when and where of formation of a contract between the carrier and third party endorsee have to be addressed. <sup>311</sup>

### 3.1.9. End of Life Cycle of Electronic Bill of Lading

The life cycle of electronic bill of lading may end up for different reasons. The obvious reason is the performance of the obligation. Under both the registry as well as the token system, end of life cycle of electronic bill of lading through performance needs to be regulated. <sup>312</sup> Like performance, refusal to perform and partial performance of the rights and obligation embodied in bill needs careful regulation.

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<sup>309</sup> Emanuel Laryea, Paperless Trade: Opportunities, Challenges and Solutions, Kluwer Law International, 2002, p.66. [Here in after Emanuel Laryea, Paperless Trade: Opportunities, Challenges and Solutions]

<sup>310</sup> Ibid.

<sup>311</sup> Samantha Peet, The Development of the Bill of lading: Its Future in the Maritime Industry p.241.

<sup>312</sup> UNCITRAL, Legal Issues Relating to the Use of Electronic Transferable Records (continued) 92012), A/CN.9/WGIV/WP.118/Add., p. para.303.

Besides, there are circumstances which necessitate replacement or conversion of electronic bill of lading to paper bill of lading or the vice versa. It could not be done arbitrarily rather there should be contractual or legislative mechanisms to do so.<sup>313</sup> Moreover, once the rights and obligations under bill are discharged, electronic bill of lading needs to be terminated to avoid its further circulation and possible manifold requests of performance.<sup>314</sup> For instance, termination of electronic bill of lading in a registry based system takes place with recording of the full performance of the obligation on the bill.<sup>315</sup>

### 3.1.10. Legal Issues Relating to Third Party Operator System

Unlike the token system in case of registry based systems, third party registry operators are required. Thus, legislation governing electronic bill of lading has to have explicit provisions on the regulation of the third-party operators.<sup>316</sup> The regulation can be at entry, during operation as well as at existing. At entry stage, the law has to state the minimum requirements to be fulfilled to apply for operating registry system. Requirements like capital, the form of incorporation and information on technological, financial, human and other resources to be employed has to be regulated.<sup>317</sup> At the operation stage, there may be erroneous communication, fraud, system breakdown or other technical problems. Determination of liability for such failures has to be addressed. Besides, the liabilities of users for erroneous communication has also to be addressed. Furthermore, dispute settlement mechanisms have to be established.

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<sup>313</sup> UNCITRAL, Legal Issues Relating to the Use of Electronic Transferable Records (continued) 92012), A/CN.9/WG. IV/WP.118/Add. 10, para., 41 and 42.

<sup>314</sup> Id., p. 10., para., 50.

<sup>315</sup> Id., p.11., para., 54.

<sup>316</sup> Id. p. 11., para. 55.

<sup>317</sup> Rouhshi Low, Replacing the Paper Bill of lading with an Electronic Bill of lading: Problems and Possible Solutions, p.202.

## 3.2. Analysis of the Existing Ethiopian Legal Environment in Light of Its Compatibility for Electronic Bill of Lading .

### 3.2.1. Introduction

Ethiopia has laws governing contract of carriage supported by the bill of lading since 1960. However, the recent advent of information communication technology in the international commercial transaction has brought some changes on the documentation process of foreign trade generally and maritime transport sector specifically. As a result, the paperless international business transaction is developing in the maritime sector. The very important case is introduction of electronic transport document like an electronic bill of lading as a substitute for paper transport documents. So that end, under this part, the researcher analyzes whether the existing legal environment of Ethiopia is compatible in accommodating introduction of electronic bill of lading or not.

### 3.2.2. Policy

As per the study conducted by UNCTAD on the economic, social and legal implications of electronic commerce and electronic international transport services for developing countries, there are policy questions to be addressed by national governments.<sup>318</sup> The study inter alia raised the commitment of governments in giving due consideration to adapting national laws and regulations to foster electronic commerce and paperless international trade as a policy question.<sup>319</sup> This study emphasized on the role of developing countries government through policy instrument for enhancing the competitiveness of developing countries in the international paperless trade. In particular, the expert group found out that a policy to reform customs procedures and application of information technology is a timely question that needs an imminent answer.<sup>320</sup> Accordingly, states crafted transport policy, foreign trade policy, logistics strategy in light of the international technological development to alleviate the grounded problems of foreign trade.

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<sup>318</sup>UNCTAD, *Electronic Commerce and International Transport Services: Best Practices for Enhancing the Competitiveness of Developing Countries*, para. 4.

<sup>319</sup>*Id.*, p.5, para. 7.

<sup>320</sup>*Id.*, p.6, para.11.

When we come to the case of Ethiopia, recently it has developed both national logistics strategy and transport policy at the national level. As per the draft national transport policy of Ethiopia, inadequate institutional arrangements; lack of proper laws, regulations and procedures which are consistent and compatible create a conducive climate for the growth of the transport sector are identified as the major challenge of the general transport sector.<sup>321</sup> The phenomenal changes in transport technology ICT, integrated logistics and supply chain management are identified as to one of the triggering factors which necessitates having policy in the transportation sector.

For addressing such challenges, the government is recommended to encourage introduction of appropriate transport technology and strengthen application of ICT and database development.<sup>322</sup> Besides, the government is also recommended to review, update and consolidate the legal and institutional framework by taking technological developments in the sector into consideration.<sup>323</sup> Moreover, encouraging acquirement of new modern and appropriate technology and techniques by setting standards and enforcement mechanism through regulation; as a policy direction.

For the maritime transport and transit sector; the draft policy identified high transport costs and delays on foreign trade in the logistic chain and lack of updated legislation of maritime law in light with modern technological developments.<sup>324</sup> As a solution, it is recommended that the government should have to ensure effective and efficient transit and logistics operation, update, adapt and disseminate maritime laws, international convention and to introduce the effective usage of information communication technology in the sector.<sup>325</sup>

Although both the national transport policy and national strategy are at the draft stage, it shows the government commitments towards transforming the existing legal framework on the maritime and transit sector to accommodate the information communication technology development in the sector. Thus, policy wise there is

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<sup>321</sup>Draft National Transport Policy of Ethiopia, p.26.

<sup>322</sup>id, p.33.

<sup>323</sup>id., p. 35.

<sup>324</sup>id., p. 58,

<sup>325</sup>id. p.59.

clear tendency towards employing electronic data interchange in the documentation of foreign trade documents which includes bills of lading.

### 3.2.3. The 1960 Maritime Code

Ethiopia is not a party to any one of the international instruments governing carriage by sea. Hence in Ethiopia, the major law governing carriage by sea as a whole and bill of lading in particular is the 1960 maritime code. Although it is not clearly known as to the material source of the code; as per Tsehai Wada, the then conventions and commercial practice governing maritime affairs are regarded as the possible source of the code.<sup>326</sup> It was the International Convention for the Unification of Certain Rules Relating Bills of Lading [The Hague Rules] that influenced almost all of the national law governing contract of carriage supported by the bill of lading and enacted before Hamburg Rules.

As the Ethiopia maritime code is enacted in 1960 in which the only governing and widely applicable rules on this area is The Hague Rules it is logical to conclude those provisions of the code governing contract of carriage supported by bill of lading are influenced by the latter one. It is also found that many provisions of the Code are very similar to that of The Hague Rules and other national legislation adopting the Rules.<sup>327</sup>

Let's examine the specific part of the code governing contract of carriage as to whether it is possible to issue an electronic bill of lading or not. Under the 1960 maritime code, there is no specific provision which expressly defines the term of lading rather only contract of carriage is defined. The law defines contract of carriage as "a contract of carriage covered by a bill of lading or any similar document of title in so far as such documents relate to the carriage of goods by sea."<sup>328</sup> "Emphasis added." According to this definition, there is no indication as to where the bill of lading is only in paper format or not; rather it only emphasizes on the nature of the document that is being a document of title.

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<sup>326</sup>Tsehai Wada, 'Package limitation, under International Conventions and Maritime Code of Ethiopia: an overview', Ethiopian Journal of Law, Vol. 21, pp.-137, p., 128129. [ Hereinafter, Tsehai Wada, 'Package limitation, under International Conventions and Maritime Code of Ethiopia

<sup>327</sup>Hailegabriel Gedicho, Maritime Law Teaching Material JLSRI, 2008, p.12. [ Here in after, Hailegabriel Gedicho, Maritime Law Teaching Material]

<sup>328</sup>Maritime Code of the Empire of Ethiopia Art 133(2).

Should the phrase “any similar document of title,” be interpreted to include an electronic bill of lading? A look at the literal interpretation of the phrase, we can argue in favor of its inclusiveness. What does the phrase ... “such documents,” refer to? is that a document required or referring documents of title in plural form? It is not referring a document requirement rather simply it is referring any documents of title. However, it would become illogical to conclude that it was the intention of the then legislature to recognize electronic bill of lading as the possible negotiable document which covers a contract of carriage; as this law was enacted while there was no practical knowledge about none of these technological possibilities

Besides, under the special part governing contract of carriage supported by bill of lading<sup>329</sup>, though there is no definition of what bill of lading is, it addresses how bill of lading is to be issued. Accordingly, as per article 181 of the maritime code, “[t]he carrier or his representative shall, after receiving the goods, issue to the shipper a bill of lading,” [emphasis added]. Here, the carrier is required to issue bill of lading after receiving the goods. It does not expressly specify that a bill of lading must be written on paper rather it only requires the carrier to issue bill of lading. The same approach is adopted under The Hague Rules. Therefore, as far as there is no specific requirement to make it in paper format, still it is difficult to conclude that electronic bill of lading is excluded from the ambit of article 181 of the code. However, it would not be the intention of the legislature to recognize electronic counterpart of paper bill of lading as the time in which paper is the only recognized mode of issuing such types of document. Moreover, the law also provides that “[a] bill of lading shall draw up in two originals, of which one shall be delivered to the shipper and the other retained by the carrier.” Unless it is issued in paper format, there would not be two originals that can be delivered and retained at the same time. Therefore, for this researcher, as far as electronic medium of communication was not known while the maritime code of Ethiopia was enacted and there is the requirement of two originals paper bill of lading, it is sound to conclude that electronic bill of lading is recognized under the maritime code of Ethiopia.

Coming to the signature issue, as per the Ethiopian maritime code, “[t]he bills of lading shall be dated and signed by the carrier’s representative.”<sup>330</sup> It is different

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<sup>329</sup> Maritime Code of the Empire of Ethiopia Art. 180-209.

<sup>330</sup> Id., the introduction sentence of article 189.

from the Hague Rules in this regard; as there is no signature requirement under the latter. The law states that bill of lading has to be signed; however, it is silent as to the mode of signature. The signature may be in a mechanical or electronic means. As the maritime code is silent on the mode of signature, it is logical to argue that, it is media neutral. However, still would be difficult to conclude that it was the intention of the legislature to recognize electronic signature at the time in which the concept of digitalization was not known.

To conclude, though the maritime code does not clearly stipulate both document signature requirement for issuance of bill of lading; it would not be the intention of the legislature to include the electronic counterpart of paper bill of lading as a transport document while enacting the code.

### 3.2.4. Multimodal Transport of Goods Proclamation

As discussed in chapter two of this paper, multimodal transport document (bill of lading) is one type of bill of lading.<sup>331</sup> In Ethiopia multimodal bill of lading is regulated under the separate law. Before the enactment of the Multimodal Transportation of Goods Proclamation, multimodal bill of lading is not properly regulated.<sup>332</sup> The imminent driving force for the enactment of the proclamation was the Ethiof Djibouti Multimodal Transport System Agreement concluded in 2006.<sup>333</sup> As a result, in 2007 the government enacted multimodal transport of goods proclamation.

Let's examine whether electronic bill of lading has a place under this proclamation. Under this law, multimodal transport document (bill of lading) is defined as a document which evidences a multimodal transport contract, the taking in charge of the goods by the multimodal transport operator, and an undertaking by him to deliver the goods in accordance with the terms of that contract.<sup>334</sup> Multimodal transport document (bill of lading) is defined as document Does it to mean only paper bill

<sup>331</sup> Supra p. 30, chapter two, section 2.3.3, sub section 2.3.3. 4.

<sup>332</sup> According to Tshai wada, only four provisions are there to regulate such types of bill of lading under both the commercial and maritime code, pp.47

<sup>333</sup> Tsehai wada, Multimodal Transportation of Goods under Ethiopian Law, Journal of Ethiopian Law, Vol. XXII, No. I, 2009, pp.49. [Hereinafter, Tsehai wada, Multimodal Transportation of Goods under Ethiopian Law]

<sup>334</sup> Multimodal Transport of Goods Proclamation No. 548 Article 2(4).

of lading? The literal interpretation of the word documentis to refer paper multimodal bill of lading.

However, article 4 of the proclamation which deals about the issuance of multimodal transport bill of lading provides that "The signatures on the multimodal transport document may be in handwriting, printed in facsimile, stamped, in symbol or made by any other mechanical or electronic means." (emphasis added). It is recognized that the signature on the multimodal transport document can be made by electronic means. Does electronic signature presuppose electronic record? May not be, it is not sufficient to say that electronic multimodal bill of lading is recognized under the proclamation.

But, when we look at the subsequent two provisions; it raised doubt as to the recognition of electronic multimodal bill of lading proper. Let's analyze each of them; article 5 of the proclamation which deals about negotiable multimodal transport document states that "A negotiable multimodal transport document may be issued by making use of any mechanical and electronic means or other means preserving a record of the particulars.....". This provision adopting electronic means of recording recognized the use of the information technology for the issuance of non-negotiable multimodal transport bill of lading. Non-negotiable multimodal transport document is a transport document which only performs the function of being an evidence of multimodal transport contract and receipt of goods by the operator. In this case, the originality of this document may not be required while delivery of the goods is performed; mere identification of the consignee by any means is sufficient. Thus, it can be recorded electronically and transferred to the consignee.

Let's come to the case of article 6; which address issues of negotiable multimodal transport document. Unlike the preceding provision, it is silent as to whether the document can be in electronic record or not. Is that a total omission of the legislature? Besides, there are terms which indicate that negotiable multimodal transport document is to be issued only in paper format. For instance, the phrase "more than one original" under the English version and the phrase "ፊት ቅጽ ላይ ብቻ" under the Amharic version presupposes paper bill of lading as there is no the concept of copies and more than one original in case of electronic bill of lading.



lading. For this researcher, the above phrases and the fact that article 1616 as to whether electronic counterpart is possible or not unlike the preceding provision shows that the legislature only intended to have paper negotiable multimodal transport bill of lading, unlike the nonnegotiable one.

Nevertheless, as far as an electronic signature is recognized under article 4 of the proclamation which governs all multimodal transport documents, still it is possible to argue that electronic negotiable multimodal transport bill of lading is recognized. Despite the law makes reference on digitalization of negotiable and nonnegotiable multimodal bill of lading, it is unhidden fact that unlike the maritime code, this proclamation gave clear legal recognition for electronic multimodal bill of lading.

The next issue is as to whether the provisions are sufficient enough to address legal issues of electronic bill of lading. As discussed in the first part of this chapter, there are many legal issues that need attention upon recognition of electronic bill of lading. Under this proclamation, nothing is stated more than indicating that the multimodal transport document and signature may be issued and signed in electronic form. It does not address how the originality, singularity and uniqueness of electronic bill of lading are to be guaranteed. Besides, it does not also address how the requirement of physical possession and transfer of rights by delivery is to be performed when the multimodal transport document is in electronic form. Moreover, issue like how electronic multimodal bill of lading can be amended and corrected is not addressed. Furthermore, it does not also address legal issues regarding the conversion of electronic bill of lading to a paper bill of lading and vice versa, issues related to end of life cycle of electronic bill of lading liability about erroneous communication and other issues that need the attention of the law.

### 3.25. The General Contract Law of Ethiopia

As discussed in part one of this chapter<sup>335</sup>, the relationship between third party endorsee and carrier is governed by the bill of lading itself. Here, unlike the relationship between the shipper and the carrier, the bill of lading is not a mere evidence rather it is also a contract of carriage. It is recognized under the Ethiopia maritime code governing bill of lading. The law stated that the terms of a contract of carriage between the carrier and shipper can be brought against third party holder of a bill of lading if and only if the third-party holder knew of terms of the contract of carriage.<sup>336</sup> This provision impliedly tell us that the relationship between third party holder and carrier is only subject to terms of the bill of lading issued by the carrier.

Thus, in effect, the bill of lading is not only an evidence of contract of carriage as between the carrier and shipper but also a contract itself for the relationship between the carrier and third-party holder. Therefore, in a case of electronic bill of lading, what is to be addressed by the law is only limited to its recognition as transport document rather issues related to electronic formation of contract has to be taken in to consideration; as it can be a contract itself beyond being an evidence for contract of carriage. The very important issues that needs to be addressed when we think of electronic bill of lading as a contract are concerns relating to when and where a new contract was formed between the carrier and third party endorsee. Besides, while the bill of lading itself is a contract, it is clear that; it cannot be made orally. Bill of lading as a contract has to pass formality requirement of being in written or electronic record form.

Coming to the Ethiopia general contract law, as per article 1681 (1) of the Code offer and acceptance may be made orally or in writing or by sign or...by a conduct...., From this provision, it can be deduced that the law does not prescribe any method of communicating offer and acceptance to form a contract. Thus, there is no prohibition under the Ethiopia general contract law to have electronic contracts. This in effect entitles parties transacting in business to conclude contracts by electronic means by using the so-called principle of party autonomy. Therefore

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<sup>335</sup> Supra p. 68, Chapter Three, section 3.1, sub section 3.1.8.

<sup>336</sup> Maritime Code of the Empire of Ethiopia Art. 194(2).

principally under Ethiopian general contract law, it is possible to issue electronic bills of lading by employing the party autonomy principle.

However, there are subsequent issues that need to be addressed by a given contract law which looks for the formation of electronic contracts. The mere fact that the law does not prohibit the formation of contract through electronic communication is not a guaranty for having the proper formation of electronic contracts. The Ethiopia general contract law does not address issues of date consent in case of formation of an electronic contract.<sup>337</sup>

For the case at hand, it is not known as to whether the mere transfer of electronic bill of lading through control amount as a conclusion of contract of carriage as between the third-party endorsee and the carrier. Moreover, under the Ethiopian general contract law, there is formality requirement provided for the valid formation of contract. As stated before, bill of lading cannot be made orally; rather it has to be prepared either in written or any other form which can able to achieve its functions. Thus, there is an obvious requirement by law or custom of merchants to make it indistinguishable form. The Ethiopian general contract law requires the signature of the parties if that contract is required to made in written form.<sup>338</sup> Regarding the mode of signature, the law clearly states that a written contract shall be affixed by the handwritten signature or thumbmark of contracting parties.<sup>339</sup>

Therefore, though the law doesn't prohibit formation of a contract through electronic means; our general contract law is not compatible to form electronic contracts; as the law fails to address issues relating to the characterization of consent and functional equivalence of signature and written requirement.

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<sup>337</sup>Gebrehiwot Entehawu, The Legal Framework for Electronic Contracts in Ethiopia with Special Emphasis on General Contract Law, p. 114.

<sup>338</sup>Civil Code of the Empire of Ethiopia, 1960 Negarit Gazette, Extraordinary Issue, Pro. No. 165, 19<sup>th</sup> Year, No.2, Art 1727(1). [ Here in after Civil Code of the Empire of Ethiopia

<sup>339</sup>Id., Art., 1728.

### 3.2.6. Security and Customs Laws of Ethiopia

As stated in chapter two of this research, bill of lading enables sale and purchase of goods that are in the process of transporting. Besides, when the transaction is financed through banks and documentary credit system, as the bank provides finance to the buyer; it is the bill of lading which serves as security for the financing bank. The traditional bill of lading fulfills this requirement of security by the fact that it is easy to identify its originality through the physical presence of the document.

Coming to the Ethiopia security law, any transferable securities can be pledged. Under the commercial code or civil code of Ethiopia, cannot find any provision which provides that electronic transferable records can serve as security notwithstanding that both the warehouse receipt proclamation and multimodal carriage of goods proclamation of Ethiopia gives electronic warehouse receipt and electronic multimodal transport document the same legal status with the paper counterpart. However, later on, the Ethiopian Commodities Exchange come up with internal working procedure which allows pledging of electronic warehouse receipts held by it.<sup>342</sup> This shows that pledging of electronic securities is possible in Ethiopia law. However, it is only limited to electronic warehouse receipt. Thus, as the basic security laws of Ethiopia which are scattered in different laws of the country does not give recognition for pledging of electronic securities and as there is no special law which regulates electronic bill of lading, it is fair to conclude that electronic bill of lading cannot serve as security in Ethiopia before having a special provision which allows doing so.

Coming to the customs law of Ethiopia, it is found that electronic records are given equal recognition with paper documents. Accordingly, as per article 2(25) of the Ethiopia custom proclamation document is defined as "any document presented physically or by electronic means to the authority to complete customs formalities..". Unequivocally the law clearly recognizes the admissibility of electronic records as equivalent document with paper documents for purpose of conducting customs formalities. Transport documents which include bill of lading are among the

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<sup>340</sup> Supra p. 2526, chapter two, section 2.3.2, sub section 2.3.2.3.

<sup>341</sup> Commercial Code of the Empire of Ethiopia, 1960 Negarit Gazzeta Extraordinary issue, Proc. No. 166, 19 Year, No. 3, Art. 950. [ Here in after, Commercial Code of the Empire of Ethiopia

<sup>342</sup> Rules of the Ethiopian Commodities Exchange, No. 5/2010 Article 9.5.2.1(d) and 9.2.4.

required document to be submitted before the authority along with the goods declaration for completing custom formalities.<sup>343</sup> The literal interpretation of this provision tells us that, electronic bill of lading is recognized as document under the current custom law of Ethiopia in order to complete customs formalities. Besides, the law also recognizes completion of customs procedures through the electronic exchange system.<sup>344</sup>

Any person is allowed to process and submit reports on the arrival or departure of a means of transport and travelers taken on board or goods loaded; to complete custom formalities, to effect payments and receive an order of release of goods electronically through the electronic exchange system to be developed by the authority.<sup>345</sup> However, subsequent provision of the custom proclamation which deals about verification of electronic information provides that submission of original documents may be required to check the accuracy of electronically transmitted messages. Thus, what is recognized under the Ethiopia custom proclamation is submission of electronic copies of paper documents; not pure electronic documents. As discussed in the first part of this chapter,<sup>346</sup> the originality of electronic bill of lading cannot be verified by bringing an original paper bill of lading.

### 3.2.7 The Ethiopian Evidence Law

It is known that so far Ethiopia does not have a separately codified evidence law. However, the absence of codified evidence law does not mean that Ethiopia does not have evidence law. The Ethiopia evidence laws are found by being scattered throughout both the substantive and adjective laws of the country which are enacted by the 1960 codification process or later on. Besides, by the fact that our substantive and procedural laws are influenced by both the common law and civil law legal systems, our evidence law is influenced by both the common law and civil law evidence rules. To begin with, under the 1960 civil code, "[a] written instrument shall be conclusive evidence, as between who signed it, of the agreement therein

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<sup>343</sup> Customs Proclamation, 20, Federal Negarit Gazette, Proc. No.859, 20<sup>th</sup> Year No. 82 Article 9. [Here in after Customs Proclamation N659/2014]

<sup>344</sup> Id, chapter twelve.

<sup>345</sup> Id., Article 78(1) (a d).

<sup>346</sup> Supra p. Chapter Three, section 3.1., sub section, 3.1.3.

contained and of the date it bears., The law recognizes that written instrument is conclusive evidence for those who signed it to perform the underlying transaction. While the code was enacted, the concept of electronic records was not known; as a result, the 1960 civil code was enacted by taking the admissibility of paper-based documents into consideration.

However, as the civil code is influenced by the civil law legal system, it is still possible to argue that electronic records generally and electronic bill of lading can be admissible; as there is an accepted principle in the common law legal system which provides that all material evidence can be admissible to establish the material truth. Thus, in a case when electronic record is brought before a court of law as an evidence, it can be accepted by alleging this principle unless disproven otherwise by specific legislation.

Coming to other laws, under the maritime code there are no provisions regarding the admissibility of bill of lading. However, in the multimodal transport of goods proclamation subject to the interpretation provided before under this part, electronic multimodal transport document is admissible before court of law.<sup>347</sup> Moreover, the 2016 computer crime proclamation of Ethiopia,

[a]ny document or a certified copy of the document or a certified printout of any electronic record relating to computer data seized in accordance with this Proclamation may be produced as evidence during court proceedings shall be admissible.<sup>348</sup>

This provision tells us that Ethiopia courts are required to accept electronic records as an admissible evidence when there is a need to do so. Generally, knowing that the Ethiopia legal system is the hybrid of common law and civil law system and also electronic records are admissible in case of the criminal proceeding, this thesis writer believes that nothing is there to prohibit admission of an electronic bill of lading as an evidence under the current Ethiopia court system.

### 3.2.8. Draft E- Laws

The Ministry of Science and Technology of Ethiopia has drafted both electronic commerce and signature law with the support of United Nation Economic Commission for Africa (UNECA) as of 2009. The draft electronic commerce law

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<sup>347</sup> Multimodal Transport of Goods Proclamation No. 548, Article 10(1).

<sup>348</sup> Computer Crime Proclamation, 2016 Federal Negarit Gazette Proc. No. 958/2016, 22<sup>nd</sup> Year, No. 83 Article 32. [ Here in after Computer Crime Proclamation 958/2016].

provides that electronic documents have the legal effect, validity or enforceability as any other document or legal writing.<sup>349</sup> By doing so, this draft law avoids the legal uncertainty created related to the validity, enforceability and admissibility of electronic records. The law also provides that an electronic record satisfy the written requirements of any law as far as the information in the record can be accessible and usable for subsequent reference.<sup>350</sup> Besides, though it has no detail regulation; it recognizes electronic signature.<sup>351</sup> Moreover, the draft law also addresses legal issues related to electronic contracts like how an electronic contract is to be formed, the validity of electronic contracts which includes the where and when about of formation of electronic contract.<sup>352</sup> Last but not least, the draft electronic commerce law of Ethiopia, openly recognizes the admissibility of an electronic data message or electronic document as an evidence with detail provision as to its submission.

However, this draft electronic commerce law is silent as to whether it is applicable for carriage of goods and transport documents or not. Electronic commerce laws including the UNCITRAL Model Law on electronic commerce clearly recognize and regulate issues relating to electronic contract of carriage and transport documents. But, the draft electronic commerce law of Ethiopia though it is somewhat similar to the UNCITRAL Model Law in other aspects, it fails to have a provision on electronic carriage contract and transport documents. Therefore, for this researcher, it is intentionally left to the legislature. Hence, the draft electronic commerce law of Ethiopia is not applicable to electronic shipping documents as there is no provisions on recognizing electronic data on shipments.

Coming to the draft electronic signature law of Ethiopia, electronic and digital signature is recognized.<sup>353</sup> It also has detail regulation on the licensing and authorization of the domestic certificate authorities and on recognition of foreign certificate authorities in Ethiopia.<sup>354</sup> It provides rules regarding the appointment of root certificate authority and its power and function.<sup>355</sup> the requirement to be fulfilled

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<sup>349</sup> Draft Electronic Commerce Law of Ethiopia, Article 5.

<sup>350</sup> Id., Article 6.

<sup>351</sup> Id., Article 7.

<sup>352</sup> Id., Article 13-17.

<sup>353</sup> Draft Electronic Signature Law of Ethiopia, Article 5.

<sup>354</sup> Id., Article 20.

<sup>355</sup> Id., Article 9-10.

for having license as a certification authority, validity period and denial of license,<sup>356</sup> about suspension, revocation, return and termination of certificate of license and service,<sup>357</sup> and also about auditing of the certificate authority by the root certificate authority.<sup>358</sup> Moreover, it has also detail regulation regarding the function of certification authority and the requirement to be fulfilled for conducting such businesslike reliable financial capacity, use of trustworthy system and others technical and regulatory requirements.<sup>359</sup>

Furthermore, the draft electronic signature law of Ethiopia addresses issues regarding the liability and obligation of certification authority.<sup>360</sup> Last but not least, the law also provides obligation of subscribers and third party relying on the transaction.<sup>361</sup> Any subscriber is required to provide accurate information, to safeguard private key, to request suspension or revocation of the certificate when it found that the security of private keys is compromised. The writer of this thesis believes that the draft electronic signature law is good enough for signing electronic bill of lading both in case of registry and token model. As a result, I would say there is no limitation on this issue under the draft electronic signature law of Ethiopia.

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<sup>356</sup> Draft Electronic Signature Law of Ethiopia, Article 11-13.

<sup>357</sup> Id., Article 14-19.

<sup>358</sup> Id., Article 21.

<sup>359</sup> Id., Article 26-27.

<sup>360</sup> Id., Article 41-43.

<sup>361</sup> Id., Article 45-48.



# CHAPTER FOUR: REGULATION OF ELECTRONIC BILL OF LADING UNDER THE UNCITRAL MODEL LAWS AND LESSON FOR ETHIOPIA

## 4.1. Introduction

The United Nation Commission on International Trade Law is an institution established under the auspices of UN General Assembly to harmonize and promote international trade laws.<sup>362</sup> UNCITRAL<sup>363</sup>, since its establishment prepared a wide range of modern harmonized rules on commercial transactions. The commission among others has been conducting the following: prepare Model Laws and rules which are acceptable worldwide, legal and legislative guides and recommendations of great practical value, updated information on case law and enactments of uniform commercial law, gives technical assistance in law reform projects and conducts and coordinates regional and national seminars on uniform commercial law.<sup>364</sup>

The substantive work on topics within UNCITRAL's work program is given to a team called working groups. So far, the commission by establishing six working groups has been working on different international trade law issues.<sup>365</sup> The third and fourth working group on transport law and electronic commerce are the specific working group tasks which address issues of electronic transferable records and transport documents.<sup>366</sup>

The 1996 UNCITRAL Model Law on Electronic Commerce, the 2001 UNCITRAL Model Law on Electronic Signature and the 2017 UNCITRAL Model Law on

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<sup>362</sup> About UNCITRAL,, available at [http://www.uncitral.org/uncitral/en/about\\_us.html](http://www.uncitral.org/uncitral/en/about_us.html) [last accessed on April 23, 2018].

<sup>363</sup> The United Nation Commission on International Trade Law

<sup>364</sup> Ibid.

<sup>365</sup> Working group I, was tasked to deal with micro, small and medium enterprises, procurement, privately financed infrastructure projects and on limits and limitation. The working group II deals with arbitration and conciliation, international sales of goods and international contract practices. The third working group addresses issues about insolvency, dispute settlement reform, online dispute resolution, transport law and international legislation on shipping. The fourth working group was tasked to address issues relating to electronic commerce, electronic data interchange, international payment and international negotiable instruments. The fifth and sixth working group was assigned to address legal issues regarding insolvency, new international economic order and security interests respectively.

<sup>366</sup> About UNCITRAL,, available at [http://www.uncitral.org/uncitral/en/about\\_us.html](http://www.uncitral.org/uncitral/en/about_us.html) [last accessed on April 23, 2018].

Electronic Transferable Records are part of the UNCITRAL Model Law which addressed legal issues of electronic bill of lading. The purpose of this Model Law is to lay a ground for national legislators a set of accepted rules at the international arena which addresses legal challenges relating to the application of electronic commerce and electronic transferable records.<sup>367</sup> States by adopting the model can avoid uncertainty created by usage of multiparty web agreements. Besides, the multiparty web agreements are not applicable to the relationship between third parties and contracting parties. However, if there is a law which regulates such issues privity of contract cannot be raised in turn the relationship between third parties and contracting parties will be governed by the law.

Generally, the first two Model Laws have not a direct application to the regulation of electronic bill of lading. They set general backgrounds on electronic commerce and signature including electronic maritime commerce. However, the UNCITRAL Model Law on Electronic Commerce addresses specific legal issues related to electronic carriage of goods and transport documents. The application of this part of the Model Law is both to non-negotiable transport documents and to transfer of rights in goods through negotiable bill of lading. Coming to the Model Law on Electronic Transferable Records, it is enacted to address legal issues relating to the whole electronic transferable records which are the functional equivalent of transferable documents or instruments.<sup>368</sup> These transferable documents and instruments can be either transferable instrument for payment of money or transferable document of title.

Bill of lading and warehouse receipt are among the major types of documents of title. Thus, negotiable electronic bill of lading as an electronic transferable record is the subject matter of this Model Law. Here, the Model Law on electronic transferable record is applicable only to negotiable bill of lading. Under this part the researcher will analyze how far the specific legal issues of electronic bill of lading are addressed under the UNCITRAL Model Law on Electronic Commerce regarding

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<sup>367</sup> Jenny Clift, 'Electronic Commerce: the UNCITRAL Model Law and Electronic Equivalents to Traditional Bills of Lading', *International Business Law*, Vol 27, 1999, p. 311-317, p.311. [Herein after, Jenny Clift, 'Electronic Commerce: the UNCITRAL Model Law and Electronic Equivalents to Traditional Bills of Lading']

<sup>368</sup> United Nation, UNCITRAL Model Law on Electronic Transferable Records, United Nation Publication, New York, 2017, Article 3. [Herein after, UNCITRAL Model Law on Electronic Transferable Records]

the non negotiable bill of lading and the Model Law on Electronic Transferable Records for negotiable bill of lading and to show lesson that Ethiopia need to take from these Model Laws. Herein after, the term electronic transferable records used to refer to electronic bill of lading

#### 4.2 UNCITRAL Model Law on Electronic Commerce (1998)

UNCITRAL Model Law on electronic commerce has two parts and 17 Articles. The first part of the Model Law is about electronic commerce in general and the second part of it is devoted to deal with specific areas of electronic commerce, in particular about electronic carriage of contracts and transport documents. Article 6, 7, 8 from the general part and all provisions of the special part are relevant provisions. Besides, part one of the model law which deals about the formation of a contract and evidentiary value of electronic records are also relevant. The first step of provisions is only limited to the straight bill of lading; whereas, provision of the Model Law on the formation of electronic contract and recognition of electronic transferable record is applicable to both to the negotiable and straight electronic bill of lading

The first provision of the Model Law provides the scope of application of this Model Law and it states that the Model Law is applicable to all electronic information used in relation to commercial activities.<sup>369</sup> The footnote provided to this article shows that commercial activities include activities relating to the carriage of goods or passengers by air, sea, rail or road.<sup>370</sup> Therefore, since electronic bill of lading is used in relation to carriage by sea, it is the subject of Model Law.

Coming to the draft electronic commerce law of Ethiopia, the scope of application of the law is subject to further amendment, change or cancellation of council of minister regulation. In this regard, it would be better if the position taken the Model Law is to be adopted. Even the proclamation need not delegate the power to determine the scope of application for further regulation of the council of minister.

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<sup>369</sup> United Nation, UNCITRAL Model Law on Electronic Commerce with Guide to Enactment with additional Article 5 bis, UN publication, Sales No. E.99.V, 1998, Article 1. [ Here in after, UNCITRAL Model Law on Electronic Commerce with Guide to Enactment with additional Article 5 bis].

<sup>370</sup> Id., footnote of Article 1.

It is good to use the wording of the Model Law that is to determine the scope in terms of commercial activities.

The Ethiopia draft electronic commerce law provisions on the legal requirement of an electronic message, writing and signature are compatible with the respective provision of the Model Law. Regarding the requirement of originality, the UNCITRAL Model Law on Electronic Commerce provides how the originality requirement of a paper bill of lading is to be fulfilled. The law requires existence of reliable assurance as to the integrity of the information on electronic record from the very time of its generation up to the final form and the information is capable of being displayed to the appropriate person<sup>371</sup> in case of a non-negotiable bill of lading, there is no need to bother about its uniqueness and singularity what is required is the production of an original bill of lading. Therefore, though multiple copies may be produced delivery of cargo can be made for the person specified the original bill of lading without requiring any further qualification.

The Ethiopia draft electronic commerce law does not regulate the originality issue. The writer of this thesis argues that the draft electronic commerce law should have to have a provision relating to how the originality requirement of electronic record can be maintained.

The next relevant provision specific to electronic bill of lading is article 16 and 17 of the Model Law. The Commission, while it was planning to prepare the Model Law, believed that carriage of goods is the primary area in which electronic communications were most likely to be used and the legal framework enabling the use of such communication was in demand<sup>372</sup>. In this regard, the Model Law dedicated two provisions which are applicable to maritime, road, railroad, air and the multimodal carriage of goods. Article 16 of the Model Law defines the scope of application of electronic commerce to carriage of goods. To mention few, issuing a receipt for goods, notifying a person of terms and conditions of the contract, claiming delivery of goods, authorizing the release of goods are the subject of digitalize carriage of goods<sup>373</sup>. Accordingly, this part of the model law is applicable

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<sup>371</sup>UNCITRAL Model Law on Electronic Commerce with Guide to Enactment with Additional Article 5bis., Article 8.

<sup>372</sup>Id., p. 58, para. 110.

<sup>373</sup>Id., Article 16.

to electronic bill of lading as it is an instrument that can be used to claim delivery of goods and as evidence for contract of carriage and recipient of goods. Although the Model Law is prepared to govern both negotiable and non-negotiable bill of lading, it left the choice for the states by allowing exclusion clause.<sup>374</sup> Besides, as of 2017, the commission came up with a separate Model Law which governs negotiable electronic bill of lading as an electronic transferable record. Henceforth, the application of part two of the model on electronic commerce is only limited to negotiable bill of lading.

Coming to the case of Ethiopia, the draft electronic commerce law needs to follow the position of the Model Law by dedicating a special part on carriage of goods in general. Moreover, it would be better to have specific provisions regarding digitalization of non-negotiable transport documents.

The Model law has also addressed another two legal issues of electronic bill of lading which are common to both straight and negotiable bill of lading. The Model Law under article 9 provides that electronic records or messages cannot be denied admissibility before a court of law for the sole reason that they are electronic messages. Moreover, regarding electronic contract, the model law addresses legal issues related to formation and validity of contracts, attribution of electronic messages, acknowledgment of receipt, and time and place of dispatch and recipient. Coming to the case of Ethiopia, in this regard, the Draft Electronic Commerce Law is the photocopy of The UNCITRAL Model Law on Electronic Commerce. The writer of this paper believes that legal issues related to the evidentiary value of electronic record and formation of electronic contracts with the endorsement of a third party are addressed by the Draft Electronic Commerce Law of Ethiopia. Thus, promulgation of the draft electronic commerce and signature law is necessary.

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<sup>374</sup>Id., Article 17 (7).

### 4.3. UNCITRAL Model Law on Electronic Transferable Records (2017)

Before directly proceeding to look in to provisions of the Model Law, it is better to say something as to the historical background of this Model Law. The preceding UNCITRAL legal texts in the areas of electronic commerce failed to address the major legal issues raised relating to the use of electronic transferable records.<sup>375</sup> Knowing this problem, as of 2011 UNCITRAL decided to prepare a Model Law to facilitate the use of electronic transferable records depending on their functional equivalence with transferable paper documents and instruments.<sup>376</sup> While preparing this model, the commission employed two guiding principles, the principle of functional equivalence and technological neutrality. The commission after the passage of six years come up with a Model Law on electronic transferable records.

The Model Law contains legal rules necessary for the use of electronic transferable records without affecting the substantive law governing the respective paper transferable instruments and documents. In terms of scope, the Model Law on electronic transferable record is only applicable to electronic transferable records that are the functional equivalent of transferable documents or instrument; it does not apply to electronic transferable records which do not have the paper counterpart.<sup>377</sup>

Having said this, let's look in to the details of the Model Law to appreciate how legal issues of electronic bill of lading are addressed. As discussed under the first part of chapter three<sup>378</sup>, the legal issues associated with use of negotiable electronic bill of lading include issues related to creation of functional equivalence for the requirement of signature, document, writing, originality, uniqueness and singularity, possession, identification of holder and issuer, circulation of the record, end of life cycle of the record and issues relating operation of the registry system.

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<sup>375</sup>The Model Law on Electronic Commerce and the Rotterdam rules, though both of them tries to recognize transferable bill of lading, there are many issues which not addressed by it. Besides, the Electronic Communications Convention excludes transferable instruments and documents from its scope of application.

<sup>376</sup>United Nation, Explanatory Note to the UNCITRAL Model Law on Electronic Transferable Records, United Nation Publication, New York, 2017, para.7. [ Herein after, Explanatory Note to the UNCITRAL Model Law on Electronic Transferable Records]

<sup>377</sup> Id., para.10.

<sup>378</sup> Supra pp. 5668, Chapter Three, section 3.1.

### 4.3.1. Functional Equivalence Rule for Writing and Signature Requirement

To begin from the requirement of signature and writing, unlike what is stated under the Model Law on electronic commerce the issue of signature and writing is clearly included under a chapter as part of the functional equivalence with the requirement of uniqueness, singularity and possession. In this regard, article 8 and 9 of the Model on Transferable Electronic Records provides a functional equivalence rule for writing and signature requirement of paper-based transferable instrument and documents.

#### Article 8. Writing

Where the law requires that information should be in writing, that requirement is met with respect to an electronic transferable record if the information contained therein is accessible so as to be usable for subsequent reference.

#### Article 9. Signature

Where the law requires or permits a signature of a person, that requirement is met by an electronic transferable record if a reliable method is used to identify that person and to indicate that person's intention in respect of the information contained in the electronic transferable record.<sup>379</sup>

As it is clearly stated under the above two provisions, functional equivalence rule for the requirement of writing and signature is applicable only relating with electronic transferable records. The law provides that the writing requirement of electronic transferable records is met if and only if the information contained therein is accessible for subsequent usage. In addition, it also stated that the requirement of signature under electronic transferable records can be satisfied if that a reliable method of identifying the person signed the record and the intention of the person relating to the information there in the record. Article 9 does not provide how the reliability of the method used to sign can be assessed. However, the Model Law has a provision on the assessment of the general reliability standard and this provision cross refer to article 12. Thus, the reliability of the method used for identifying the person who signed can be assessed depending on the parameter stated under article 12 of the Model Law.

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<sup>379</sup> UNCITRAL Model Law on Electronic Transferable Record, Article 8 and 9.

Coming to the possible lesson for Ethiopia, the Model Law on electronic transferable records is only applicable to electronic transferable records. In doing so the Model Law employed a different characterization of functional equivalence for the requirement of writing and signature in electronic transferable records. In this regard, the commission advises states to have separate electronic commerce and electronic transferable record law; as it is not possible to enact a single law which addresses the unique characteristics of electronic transferable records.<sup>380</sup> Therefore, for Ethiopia, it is sound to adopt the characterization taken under the model law. Accordingly, the writer of this research believes that Ethiopia should enact a law that governs electronic transferable record and which is separate from the draft electronic commerce law.

#### 4.3.2. Functional Equivalence Rule for Originality, Uniqueness and Singularity Requirement

As stated in the first part of chapter three<sup>381</sup>, originality and uniqueness are the requirement for bill of lading to perform the function of being a document of title. Assignment of the rights and liabilities embodied on bill of lading requires physical transfer of the singular and original bill of lading and such assignment in case of paper bill of lading is easy and can be done through the transfer of endorsed bill of lading. However, when it becomes digitalized, it is very difficult to avoid the possible replication of the electronic records unless there is a mechanism to create electronic equivalence of the function of originality and uniqueness requirement of the paper bill of lading.

The UNCITRAL Model Law on Electronic Transferable Record avoids possible problem of existence of multiple ones to perform the same obligation by employing three combined sets of criteria<sup>382</sup>. The first one is the singularity criteria. The model requires using reliable method to identify that electronic record as the electronic transferable record.<sup>383</sup> Here, the law bothers on the singularity of the record by using an article and a singular noun which is

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<sup>380</sup> Explanatory Note to the UNCITRAL Model Law on Electronic Transferable Record para. 74 and 78.

<sup>381</sup> Supra p.58, chapter Three, section 3.1., sub section 3.1.3.

<sup>382</sup> Explanatory Note to the UNCITRAL Model Law on Electronic Transferable Record para. 834.

<sup>383</sup> UNCITRAL Model Law on Electronic Transferable Record, Article, (10) (i) (a).



electronic transferable record<sup>384</sup> [emphasis added]. The second approach is the control approach. In this regard, the law provides that an electronic record shall be capable of being controlled from its very creation until it ceases to have any legal effect or validity.<sup>385</sup> The third criteria set by the Model Law is about retaining the integrity of a given electronic record<sup>386</sup> to that end according to the explanatory note of the Model Law at hand, "Verification of the integrity of the electronic transferable record could be achieved if a reliable assurance is provided of the link between an electronic signature affixed on the record and the content of that record at the time the electronic signature was affixed." The Model Law sets general reliability standard to determine the reliability of the method employed to identify the singularity, uniqueness and integrity of the electronic transferable record.<sup>386</sup>

#### 4.3.3. Functional Equivalence Rule for Physical Possession and Transfer of Rights by Delivery Requirement and Identification of Holder

As discussed under the third chapter of this paper dealing with legal issues of electronic bill of lading<sup>387</sup>, it is identified that transfer of rights embodied in a paper based negotiable bill of lading can be achieved only with the transfer of the actual or constructive possession of that document. However, in case of electronic bill of lading it cannot be transferred either through actual possession or constructive possession.

The UNCITRAL Model Law on Electronic Transferable Records come up with a functional equivalence rule for the requirement of physical possession and transfer of rights by delivery. Under article 11, the Model Law provides that:

- (1) Where the law requires or permits the possession of a transferable document or instrument, that requirement is met with respect to an electronic transferable record if a reliable method is used:
  - (a) To establish exclusive control of that electronic transferable record by a person; and
  - (b) To identify that person as the person in control.

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<sup>384</sup> UNCITRAL Model Law on Electronic Transferable Record, Article, 10 (1) (i) (a).

<sup>385</sup> Id., Article 10(1) (i)(b).

<sup>386</sup> Id., Article 12.

<sup>387</sup> Supra p. 59, Chapter Three, section 3.1, sub section 3.1.4.

2. Where the law requires or permits transfer of possession of a transferable document or instrument, that requirement is met with respect to an electronic transferable record through the transfer of control over the electronic transferable record.<sup>388</sup>

As per the first sub provision, the requirement of possession of a transferable document or instrument can be achieved if and only if a reliable method is used to establish the existence of exclusive control of a given electronic transferable record by a person and to identify that person as person in control of the transferable record. The requirement to identify the person in control and that the method or system employed to establish control as a whole should achieve the identification purpose with respect to all the parties involved in the transaction.<sup>389</sup> By doing so, the person in control of the electronic transferable record can have the same legal status as possessor of an equivalent transferable document or instrument.<sup>390</sup>

There are electronic transferable management systems which are based on distributed ledgers; blockchain technology. Such types of system identify the person in control by referring to pseudonyms rather than to real names of the underlying transaction. In such case, the system needs to show the link between the pseudonym and real name.<sup>391</sup> The holder of the private key corresponding to the address at which an electronic bill of lading is kept will be deemed to have possession of it.<sup>392</sup>

According to Koji Takahashi, block chain record book displays the addresses at which tokens are maintained.<sup>393</sup> The holders are pseudonymous as the addresses are cryptographic identities of the holders of the tokens in which they cannot be displayed by their real name.<sup>394</sup> This can be done by having private and public keys. Private keys matching to the addresses are secret and this private key creates the corresponding public key and the public key creates an address. By doing so, the block chain technology linked pseudonym with the real name.<sup>395</sup>

The second sub provision of article 11 of the Model Law provides that transfer of control over an electronic transferable record is the functional equivalent of delivery

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<sup>388</sup> UNCITRAL Model Law on Electronic Transferable Records, Article 11.

<sup>389</sup> Explanatory Note to the UNCITRAL Model Law on Electronic Transferable Record, para., 116.

<sup>390</sup> Id., para 113.

<sup>391</sup> Id., para.117.

<sup>392</sup> Ibid.

<sup>393</sup> Koji Takahashi, Block chain Technology and Electronic Bills of Lading 208.

<sup>394</sup> Ibid.

<sup>395</sup> Ibid.

of the negotiable bill of lading. The requirement of surrender under the paper bill of lading can be performed by mere transfer of control over the electronic lading.

#### 4.3.4. Rules on Amendment of Electronic Bill of Lading

As stated before, errors may occur on a given bill of lading while it is issued or later on. For instance, the information provided by the shipper may be different from what is actually recorded on the bill. In such cases amendment is inevitable. In case of a paper bill of lading, the amendment can be done without any complication since the amendment can be straightforwardly identifiable in a paper-based environment due to the nature of the media used.<sup>396</sup> But, the case of amendment of the electronic bill of lading is not likewise. The UNCITRAL Model Law on electronic transferable record come up with a provision which addresses how electronic transferable record can be amended. The Model Law stated that, ... "[the requirement of amendment] is met with respect to an electronic transferable record if a reliable method is used for amendment of information in the electronic transferable record so that the amended information is identified as such."<sup>397</sup> [emphasis added] Here, the Model law requires both recordings of the amended information being identifiable of such action.

#### 4.3.5. Rules on Replacement or Conversion of Electronic Bill of Lading to Paper Bill of Lading and vice versa

Existing laws governing paper bill of lading may not even forecast the possibility of conversion to electronic bill of lading and vice versa. Replacement of paper bill of lading to electronic bill of lading and vice versa may be there for commercial and other reasons. The commission addresses these issues under article 17 and 18 of the Model Law on Electronic Transferable Records. Article 17 addresses how transferable document or instrument can be replaced with an electronic transferable record. Article 17 of the Model Law provides that;

1. An electronic transferable record may replace a transferable document or instrument if a reliable method for the change of medium is used.
2. For the change of medium to take effect, a statement indicating a change of medium shall be inserted in the electronic transferable record.

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<sup>396</sup> Explanatory Note to the UNCITRAL Model Law on Electronic Transferable Records, para.157.

<sup>397</sup> UNCITRAL Model Law on Electronic Transferable Records Article 16.

3. Upon issuance of the electronic transferable record in accordance with paragraphs 1 and 2, the transferable document or instrument shall be made inoperative and ceases to have any effect or validity.

4. A change of medium in accordance with paragraphs 1 and 2 shall not affect the rights and obligations of the parties.<sup>398</sup>

Double fold requirements are provided. The first one is, a reliable method should be used for the change of medium. The reading of article 12 tell us that the reliability of the method is to be assessed depending on the general reliability standard specified there. Second, the law requires insertion of a statement in the electronic transferable record that indicates the fact of change of medium. The model law also addressed the status of the transferable document which is converted to the electronic transferable record. According to sub article 3, as soon as replacement is made the paper document shall be made of action and ceases to have legal effect. Coming to the case of replacement of electronic negotiable bill of lading by paper bill of lading, the Model law also provides the same requirement like what is provided under article 17.<sup>399</sup> Thus, no need to go through the detail.

#### 4.5.6. Rules on Reliability of the Operator System

As a matter of fact, unless there is a means to measure the reliability of the operating system (be it third party registry system, token system or distributed ledger), digitalization of documentation process cannot be effective. The UNCITRAL Model Law on Electronic Transferable record set down the following general reliability standards which are applicable to all electronic transferable records management system providers. Inter alia, includes a given operation record system reliability can be measured depending on its operational rules regarding the reliability of the system,<sup>400</sup> assurance of data integrity,<sup>401</sup> the ability to prevent access to and use of the system by unauthorized parties,<sup>402</sup> secureness of hardware and software,<sup>403</sup> the existence of regular accurate audits carried out by an independent body,<sup>404</sup>

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<sup>398</sup> UNCITRAL Model Law on Electronic Transferable Record Article 17.

<sup>399</sup> Id., Article 18.

<sup>400</sup> Id., Article 12(a)(i).

<sup>401</sup> Id., Article 12(a)(ii).

<sup>402</sup> Id., Article 12(a) (iii and iv).

<sup>403</sup> Id., Article 12(a)(v).

existence of declaration by a supervisory body or an accreditation body regarding the reliability of the method and to have an applicable industry standard.<sup>404</sup>

Coming to the lesson that Ethiopia draw from the Model Law on Electronic transferable records, as issues related to the functional equivalence of uniqueness, originality, possession, transfer of rights by delivery is not yet addressed. Under the Ethiopia draft electronic commerce law, the government shall take the model law as a bench mark to legislate a separate law on electronic transferable records. The same is true to issues related to amendment, conversion of electronic records, loading and reliability of the operators system.

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<sup>404</sup>UNCITRAL Model Law on Electronic Transferable Records Article 12(a) (vi and vii).

# CHAPTER FIVE: CONCLUSION AND RECOMMENDATION

## 5.1. Conclusion

The study raised two interconnected research questions:

• Should Ethiopia introduce electronic bill of lading?

• How should the country regulate the electronic bill of lading?

The answer to the first question is yes. The following factors are identified by the researcher 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 study 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 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 thesis 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 the 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 a 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.

Concerning the second question, first the paper identified and expounded the possible legal issues associated with digitalization of paper bill of lading. The creation of functional equivalence for the requirement of signature, document, writing, originality, uniqueness and singularity, possession, identification of holder and issuer of electronic bill of lading, circulation of the electronic bill of lading, evidentiary value of electronic bill of lading, formation of contract as between the carrier and endorsee, end of life cycle of electronic bill of lading and attribution of the reliability of the operating system are the major issues of electronic bill of lading that need to be addressed by law.

Afterward, the paper examined the compatibility of the existing legal environment of Ethiopia in accommodating electronic bill of lading or not? The writer analyzed the policy and laws of the country which is relevant for governance of bill of lading. In terms of policy, although both the draft national logistics strategy and transport policy are at the draft stage, the study showed that the government of Ethiopia is working towards digitalizing transport documents used in the international trade. Coming to the regulatory framework, the analysis of the maritime code revealed that there is no clear statement under the law which requires issuance of bill of lading in document or writing form. However, for the writer of this paper as far as electronic medium of communication was not known while the maritime code of Ethiopia was enacted and there is a requirement of two sets of originals under the same name

law leads to conclude that it is not possible to issue electronic bill of lading. Regarding the signature requirement, the maritime code is still silent as to how it can be signed. The writer of this research does not believe that it was the intention of the then legislature to recognize electronic signature at the time in which the concept of digitalization was not known at all.

Coming to the Multimodal Goods Proclamation of Ethiopia, the study revealed that electronic bill of lading is recognized although there is a difference between the negotiable and non-negotiable multimodal transport document. The study finds out that the law is not sufficient to address legal issues of electronic bill of lading. It fails to address how the originality, singularity and uniqueness of electronic bill of lading are to be guaranteed, how the requirement of physical possession and transfer of rights by delivery is to be performed, how electronic multimodal bill of lading can be amended and corrected and other legal issues which can be raised with digitalization of bill of lading.

Related with the legal issue associated with the status of electronic contracts as between the endorsee and the carrier under the Ethiopian law, it is found that an electronic contract between the carrier and the party endorsee through bill of lading is not recognized although there is no prohibition to have electronic contracts under the Ethiopia General Contract Law. The law fails to address issues relating to the characterization of consent and functional equivalence of signature and written requirement stated under the law as a validity requirement. Concerning the compatibility of Ethiopia security and customs laws in light of introduction of electronic bill of lading, it is found that the basic security laws of Ethiopia which are scattered in different laws of the country do not give recognition for pledging of electronic records as security. As a result, under the existing Ethiopian security law, electronic bill of lading cannot be pledged before having a special provision which allows doing so. It is also indicated that the customs law of Ethiopia allows to use electronic records for customs formalities. However, the existence of a requirement to produce original documents in order to check the accuracy of electronically transmitted messages hinder the application of negotiable electronic bill of lading.



Regarding the admissibility of electronic bill of lading as an evidence before Ethiopian court of law, it is noted that nothing is there to prohibit admission of an electronic bill of lading as an evidence under the current Ethiopian evidence law. Moreover, the analysis of the draft electronic commerce law of Ethiopia indicated that electronic carriage of goods and transport documents are not included. To sum up, the existing legal environment does not properly address legal issues associated with introduction of electronic bill of lading although there is a tendency towards recognizing electronic bill of lading as electronic records.

Finally, the researcher has examined the UNCITRAL Model Laws on Electronic Commerce and Electronic Transferable Records to assess how legal issues associated with electronic bill of lading are addressed and with a view to drawing lesson to Ethiopia. It is indicated that the government shall take the above model laws as benchmark to legislate a separate law on electronic transferable bill of lading and to reconsider the draft electronic commerce law in light of including carriage contracts and transport documents as its subject matter.

## 5.2. Recommendation

The study has revealed that there is need for introduction of electronic bill of lading in Ethiopia. Conjointly, it is also shown that the Ethiopian legal environment is not adequately compatible for issuance of electronic bill of lading. On the bases of these findings, the researcher would like to recommend the following.

- Ethiopia should enact law on Electronic Transferable Records for addressing legal issues associated with negotiable electronic bill of lading. The law shall include rules on functional equivalence of signature, writing, uniqueness, originality, possession, transfer of rights by delivery, amendment, conversion of electronic bill of lading to paper bill of lading and vice versa, and reliability of the operator system.
- Ethiopia should promulgate the draft electronic commerce law by including additional provisions related to carriage of goods, transport documents, functional equivalent provision for originality requirement of paper document and provision which allows certification of electronic records.
- Article 81 of the customs proclamation No. 859/2014, which require submission of original documents to check the accuracy of electronically transmitted

information, should be amended to limit its application on electronic bill of lading. The originality of electronic bill of lading cannot be verified by submission of original paper document.

• Ethiopia shall enhance information technology and power supply infrastructure to avoid problems associated with weak network connectivity and extended periods of power cut.

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