

E-COMMERCE IN TURKEY

POTENTIAL FOR DEVELOPMENT AND LOGISTICS PROCESSES



 **utikad**

Association of International Forwarding and Logistics Service Providers



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Date of Publication

February 2019

ISBN

978-605-63367-9-9

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UTIKAD

Founded in 1986, the Association of International Forwarding and Logistics Services Providers (UTIKAD) is the largest non-governmental organization of the logistics industry in Turkey and the umbrella organization for more than 450 companies that offer land, air, sea, rail, combined transportation, warehousing and Customs brokerage services in Turkey and abroad.

Being the voice of Turkish logistics industry, UTIKAD is not only representing Turkish logistics companies and freight forwarders at national level, but also promotes the image and interests of Turkish logistics abroad, thus representing the potential and dynamism of this sector.

UTIKAD also serves as Turkish representative in the International Federation of Freight Forwarders' Associations (FIATA), the world's largest NGO of the logistics industry. UTIKAD takes part in various FIATA working groups and has been representing our country in the Presidency, holding one of the Senior Vice President positions.

Being associate member of the European Association for Forwarding, Transport, Logistics and Customs Services (CLECAT), UTIKAD is at the same time the founding member of the Economic Cooperation Organization Logistics Provider Association (ECOLPAF). As sole logistics NGO representing Turkey, UTIKAD is also a member of the Intermodal Transportation and Logistics Working Group of the United Nations Economic Commission for Europe (UNECE).

INTRODUCTION

Now an indispensable element in our daily lives, the Internet has transformed the shopping preferences of the consumers and the way in which trade is carried out on a global scale; recently the share of e-commerce in total retail sales has increased steadily.

In parallel with the swift pace of electronic commerce's growth in the rest of the world, the volume of e-commerce has also increased in Turkey in these years. However, this increase has not yet reached the desired levels in terms of international competitiveness: companies have not developed a sufficient level of awareness, and in particular companies engaged in e-export have faced a number of obstacles.

At this point, in order to uncover Turkey's e-export potential and to identify the problems, UTIKAD decided to call its members to form an e-Commerce Focus Group, chaired by Nil Tunaşar, Member of UTIKAD's Board of Directors. As a result of the studies conducted by the Focus Group, the "e-Commerce In Turkey - Potential For Development And Logistics Processes Report" has been created.

The report, which aims at facilitating the access of SMEs into export-oriented e-commerce activities and to eliminate the obstacles to export-oriented e-commerce, includes recommendations for increasing the share of export-oriented e-commerce in total trade through the analysis of different conditions, including logistics processes, and in particular their optimization.

During the preparation of the report, besides the information gathered at the meetings of the UTIKAD e-Commerce Focus Group, various meetings with the stakeholders of the e-commerce industry took place, in order to include their opinions. In addition, reports and statistics produced by various national and international institutions connected with export-oriented e-commerce activities have been used.

While the studies on the report were ongoing, the e-Export Strategy and Action Plan (2018-2020) was published in the Official Gazette (Issue 30324, dated 6th of February 2018). The opinions expressed by UTIKAD in the report appear to overlap with the targets and plans included in the action plan to a large extent. The arrangements that are in line with UTIKAD's opinions and the objectives set forth in e-Export Strategy and Action Plan will be of valuable contribution to the development of the e-Export Strategy in Turkey.

We would like to thank all the members of UTIKAD e-Commerce Focus Group, who made a great contribution to the preparation of this report, as well as all the industry representatives who supported us with their valuable suggestions and opinions.

ACKNOWLEDGEMENTS

ACADEMIC SUPPORT

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E-Commerce Platforms and Companies

- Alibaba.com/E-Glober
- N11.com
- Gittigidiyor.com
- Modanisa.com
- Markafoni.com
- Saatvesaat.com
- Sefamerve.com

Payment Service Provider

- PayU Turkey

International Surveillance and Certification Body

- SGS Turkey

Non-Governmental Organizations

- ETID (Association of Electronic Commerce Operators)
- KARID (Association of Cargo, Courier and Logistics Operators of Turkey)

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EXECUTIVE SUMMARY

The "e-Commerce and e-Export in Turkey – Potential for Development and Logistics Processes Report" was prepared with the contributions of UTIKAD's e-Commerce Focus Group and covers the dynamics of the industry, the problems encountered and suggestions for solution.

The report consists of 5 parts, entitled, respectively, "Turkey's Domestic and Cross-Border e-Commerce Potential, Problems Encountered due to Traditional Approaches and Suggestions for Solutions, Logistic Processes, Problems and Suggestions for Solution, Leading Countries and Successful Practices in e-Commerce, New Generation Practices in e-Commerce Logistics".

Turkey's Domestic and Cross-Border e-Commerce Potential

Turkey's potential for e-commerce development, which could expand Turkey's export throughput has been evaluated and substantiated by statistical data where applicable.

World Overview: In e-commerce, the purchasing pattern is undergoing a transformation from business-to-business (B2B) to business-to-consumer (B2C) and even consumer-to-consumer (C2C). Today, the multi-channel structure is preferred over the traditional trade's single-channel structure.

Turkey's e-Commerce Volume: The share of online retail within the total trade in Turkey, which was 3.5% in 2016, rose to 4.1% in 2017. Turkish e-commerce market volumes, which were found to be TL 30.8 billion in 2016, climbed to TL 42.2 billion in 2017.

Turkey's Global e-Commerce Volume: Turkey's e-commerce market amounted to USD 5,955 million in 2018, Turkey having been estimated to be the second fastest growing country in B2C e-commerce in 2017.

e-Commerce Usage and Technological Infrastructure: 21% of internet users in Turkey are shopping online. The penetration rates of companies vs. individuals using e-commerce are respectively 11% and 25%. According to the results of the Global Competitiveness Report 2017, Turkey is ranked 67th among 138 countries in the technological readiness sub-index.

Problems Encountered due to Traditional Approaches

This part gives account of the problems, as they faced by companies whilst performing e-commerce activity, arising from their traditional approach and preventing them from successfully concluding e-commerce transactions.

Traditional Structures of Companies: The fact that – in general – producers do not have the habit of making their sales over the Internet, combined with the necessity of investing in new

infrastructure for e-commerce constitutes a big obstacle for the operators. There is also a lack of managers with appropriate specialization. The development of e-commerce support programs for SMEs by the chambers of commerce, as well as the organization of ad-hoc training programs would help companies to adapt to e-commerce with greater ease.

Lack of Trust: The fact that consumers are exposed to fraud in the online environment also negatively affects e-commerce. In addition, another barrier for cross-border e-commerce is that a reliable worldwide brand image has yet to be completely achieved for Turkish goods. Acquiring a quality certificate from an international supervising and auditing company could support the creation of a reliable brand image internationally.

Sales and Marketing Issues: the lack of a sufficient technological infrastructure for sales and marketing activities and the insufficient coverage of call centers, capable of answering calls in several languages, are other barriers faced by the companies in reaching out to potential international customers. Such problems may be overcome by the companies engaged in e-export through the development of omni-channel strategies, the strengthening of information infrastructures and the establishment of independent call centers working in multiple languages.

Payment Systems: The expansion of e-commerce in the world implies considering the threat of online fraud. Special security measures are being developed in various parts of the world, notably in developed countries, in order to combat this threat. Since credit cards principally constitute the preferred method of payment in e-commerce in Turkey, it is important to develop systems that enable secure shopping whilst maintaining reasonable ease in making payments.

Logistics Processes, Problems and Suggestions for Solution

This part describes the different logistic processes in domestic e-commerce and e-export, the problems experienced by the companies during these processes and the suggestions for enhancing e-export by alleviating the problems.

Domestic e-Commerce Logistics: The problems experienced with respect to logistics infrastructure and product delivery in particular make it difficult to build a perception of trust in e-commerce. Competition based on low prices, which is very common among cargo-service companies, leads to a diminishing service quality. Product returns result in additional logistics costs. The problems experienced in domestic e-commerce logistics would be contained if companies providing special regional solutions in areas where the cargo infrastructure does not have sufficient service quality were formed, in parallel to providing SMEs with more information about the logistics process required by e-commerce

Cross-border e-Commerce Logistics – e-Export: There are operational issues increasing logistics costs and also preventing e-export from attaining the targeted levels: these include the lack of permanent specialists in Customs offices, the problems connected with issuing Electronic Commerce Customs Declaration (ECCD) for export (causing sometimes extra warehouse and

storage fees), the payment of universal service obligation compensation fees by more than one company for the same shipment, and other expenses and/or taxes.

Corrective regulatory arrangements in cost and operation issues as well as government incentives for e-exports, the creation of domestic and international collection centers are measures that could play an important role in increasing Turkish e-export volumes.

Leading Countries and Successful Practices in e-Commerce

The group shared statistical information on China, USA and the UK, the countries with the highest volume in the global e-commerce market, and examples of successful practices were presented at the meetings.

China: In China, the world's largest e-commerce market, the share of e-commerce within its total GDP is 5.8%; whereas the ratio of online retail to wholesale retail is 20.4%. The growth of China in e-commerce has been outstanding due to the support of public policies. Pilot regions were established in China for cross-border e-commerce, and incentives were provided to support e-commerce.

USA: In the USA, the share of e-commerce within total GDP is 2.3%; whereas the ratio of online retail to wholesale retail is 10.5%. In the USA the agreements signed with e-commerce platforms to improve e-commerce performance and the appropriate restructuring of Customs processes were instrumental in achieving this level of effectiveness.

UK: In the UK, which is the hub of the European e-commerce market, the share of e-commerce within total GDP is 7.9%; whereas the ratio of online retail to wholesale retail is 14.9%. In UK, the advantage in growth afforded by the companies due to governmental support and the e-export packages developed by the government have helped significantly to increase the volume of British e-commerce.

Next Generation Practices in e-Commerce Logistics

In order to catch up with the speed of the rapidly growing e-commerce market, it has become mandatory for all parties involved in e-commerce, notably the logistics industry and retailers, to make investments in new technology. Developing technology has also brought about ways to increase customers' satisfaction and security through new methodologies such as block-chain.

Smart supply chain applications such as smart warehouses and order processing centers (fulfillment centers), and changing delivery patterns e.g. drone delivery service, click and pickup, smart customer relationship applications will be introduced, whilst block-chain technology will help mitigate security concerns toward e-commerce: these will be used more and more frequently in e-commerce transactions in future.

1. TURKEY'S DOMESTIC AND CROSS-BORDER E-COMMERCE POTENTIAL

1.1. Development of Domestic e-Commerce

e-Commerce activities in Turkey started in the late 1990s. In Turkey, studies regarding e-commerce started in 1997 for the first time with a meeting organized by the Supreme Council for Science and Technology (BTYK). At that meeting, it was decided to establish a working group in order to set up an "Electronic Commerce Network" and to expand electronic commerce in our country, the Undersecretariat of Foreign Trade (DTM) was assigned the task of coordinating these studies. TÜBİTAK was assigned the secretariat's duties. Pursuant to that decision, legal, technical and financial working groups were formed within the body of the Electronic Commerce Coordination Board (ETKK), under the chairmanship of the Undersecretariat of Foreign Trade and the studies then began.¹

With more and more companies shifting towards e-commerce, the industry grew by 35.5% year on year between 2008 and 2012. Between 2012 and 2017, the growth of the industry was estimated to have been 15.8% annually.² The high growth rate seen between 2008 and 2012 was mainly due to the increased consumer trust in electronic commerce, in line with the improvements in banking infrastructure and the development of secure payment systems. The development of ADSL and Fiber infrastructure, 3G connections, widespread mobile internet usage, resulting in cheaper access to the internet, have been instrumental in the increase registered in the period.

With the development of e-commerce, sales and interaction channels have also been diversified. In e-commerce, the purchasing patterns have been undergoing a transformation toward business-to-customer (B2C) and even consumer-to-consumer (C2C) paradigms. Sales through social media accounts are of great importance in this transformation. In 2017 the active use of social media in Turkey increased by 17% and reached 48 million users. Shopping with mobile devices accounted for approximately half of the total e-commerce volume.³ The widespread use

¹ History of E-commerce in Turkey, <https://www.ekonomi.gov.tr/portal/content/conn/UCM/path/Contribution%20Folders/web/Hizmet%20Ticaret/Elektronik%20Ticaret/T%C3%BCrkiyede%20e-ticaret%20tarih%C3%A7esi%20devam%C4%B1.pdf?lve>

² E-Commerce as a Focus on the Digital Market: Turkey's Place in the World, Present Status and Steps for the Future, TUSIAD, 2014

³ Digital in 2017 Global Overview, We Are Social & Hootsuite, 2017

of mobile devices in online shopping led to a number of different channels in trade. Today, the omni-channel structure is predominant over the single-channel structure, typical in traditional trade. Omni-channel aims to use a single device to manage supplies through several channels. Thanks to this method, orders can be placed from mobile devices, can be managed through computers and pickup, change and return can take place at physical stores. A well-designed omni-channel system does not only assure customer satisfaction, but it also contributes to increasing the trading efficiency of the companies.

While the industry was maintaining a growth and development trend, a number of requirements for regulating electronic commerce have emerged and various legislative arrangements have been introduced. In this context, secondary regulations have been implemented within the framework of Law on the Regulation of Electronic Commerce, Number 6563.

1.2. Cross-border e-Commerce & e-Export

e-Export represents the next stage of e-commerce in Turkey, whereby e-commerce indeed started crossing borders. For producers, immediate access to remote markets stands out as the most important advantage in cross-border e-commerce. The e-export companies that make good use of this competitive advantage increase their market share much faster than traditional exporters. With e-export the export volume of Turkey, which shrank in the last 10 years, is targeted to expand at the same time expanding also the range of exported goods.

e-Commerce is frequently mentioned in the 2015-2018 Information Society Strategy (BTS) and Action Plan, and Turkey is reckoned to become a regional e-commerce hub, offering services to the rest of the world, notably including neighboring countries and closer markets. In the action plan it is also stated that local-e-commerce companies will be encouraged, with a strategic approach to assist their penetration into international markets, thus making e-commerce an important export channel for Turkey.⁴ Within the scope of the Action Plan the idea is also to devise an e-export strategy.

Moreover, an "e-Export Strategy Workshop" was organized in Denizli by the Turkish Council of Exporters (TIM) in coordination with the Ministry of Economy in October 2015. The objectives of the e-Export Workshop were, amongst others, to establish an "e-Export Strategy and Action Plan" on e-export. The e-Export Strategy and Action Plan (2018-2020) was then published in the Official Gazette 30324, issued on 6 February 2018.

⁴2015-2018 Information Society Strategy and Action Plan, Republic of Turkey, Ministry of Development, 2015

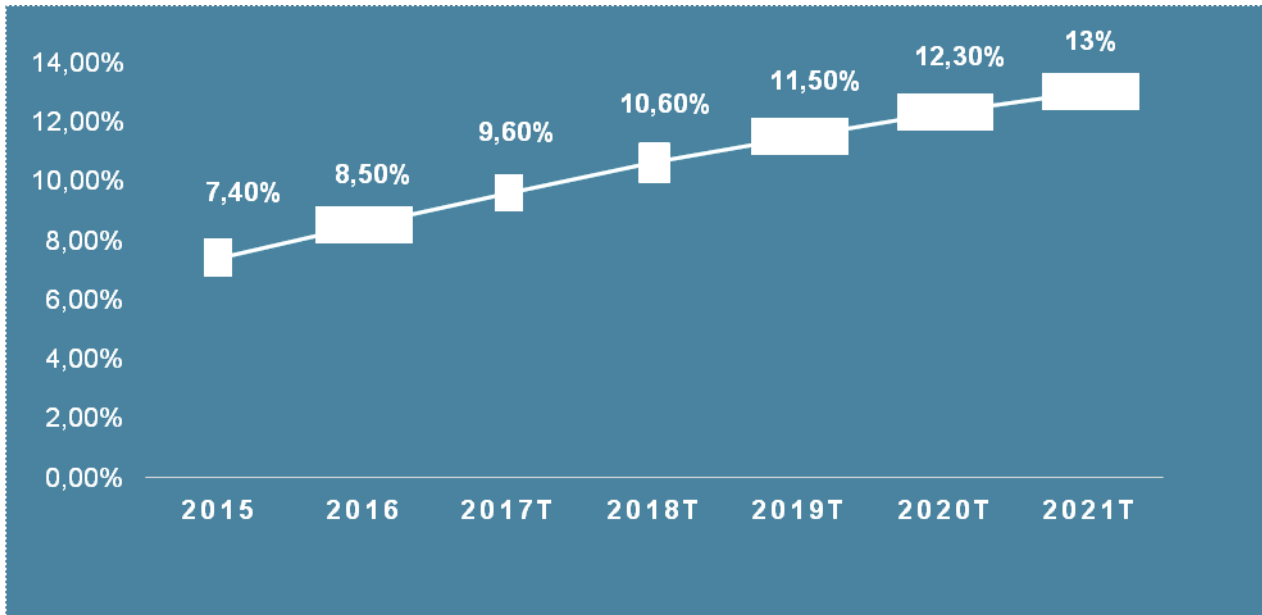
1.3. e-Commerce Volume and Current Status Indicators

It has been estimated that retail sales worldwide, including e-commerce, reached USD 23,445 billion at the end of 2017. The share of global e-commerce within total retail sales which was 3.6 percent in 2011 jumped to 8.7 percent in 2016.⁵

According to 2016 data published by TÜBİSAD, the average ratio of online commerce to total retail was approximately 8.8% in developed countries and an average of 3.8% in developing countries. In Turkey, online commerce accounts for around 3.5% of the total retail.⁶ According to 2017 data, the average ratio of online commerce against the total retail figure is approximately 9.8% in developed countries and an average of 4.8% in developing countries.

The global increase in online trade/retail extended its influence to Turkey, with the share of online commerce within the total retail figure rising up to 4.1% in Turkey.⁷

Figure 1: Ratio of e-Commerce toward Total Commerce Worldwide (%)



Source: *The New Growth Engine in the Digital World: e-Commerce, TÜSİAD 2017*

Turkey shows a high growth potential in e-commerce. The Turkish e-commerce market volume, which was observed to be TL 30.8 billion in 2016, climbed to TL 42.2 billion in 2017. The volume of retail sales, which was 17.5 in 2016, rose to 22.9 in 2017.⁸

⁵Retail Sector Overview 2018, KPMG, 2018

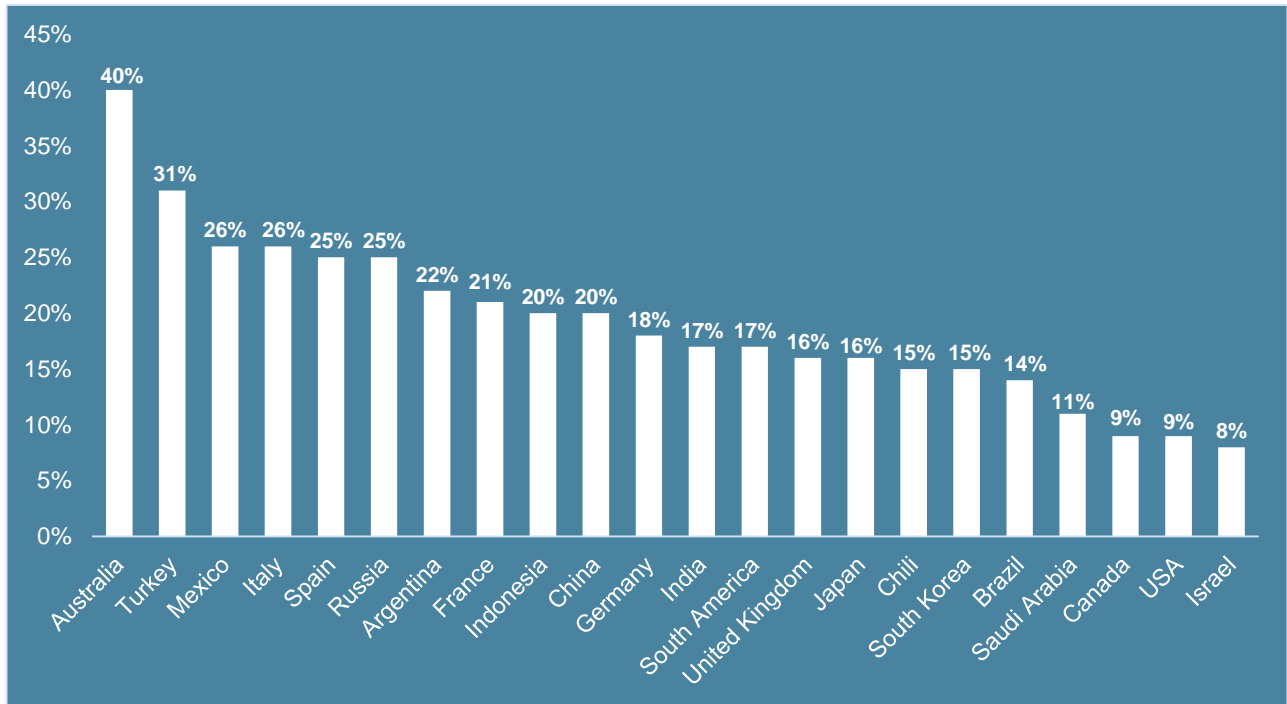
⁶E-Commerce Market Size in Turkey in 2016, TUBISAD, 2017

⁷E-Commerce Market Size in Turkey in 2017, TUBISAD, 2018

It is estimated that Turkey's B2C e-commerce market revenue will reach USD 5,955 million in 2018, and USD 6,853 million by 2023, with an annual growth rate of 2.8%.⁹

According to a research conducted in 22 countries by an e-Commerce Foundation based in the Netherlands, Turkey is estimated to be the second fastest growing country in B2C e-commerce in 2017.

Figure 2: B2C e-Commerce Growth Rates by Country 2017 (Estimated)



Source: E-commerce Foundation

Turkey needs to make steps to improve the information, communication and Internet infrastructure in order to be able to use and build upon its potential in e-commerce. The most important indicators of e-commerce development are undoubtedly internet and information technologies usage. Yet, Turkey has not made sufficient progress in information and technology globally as yet.

⁸ibid

⁹ <https://www.statista.com/outlook/243/113/ecommerce/turkey#>

According to the results of the Global Competitiveness Report 2017 published by the World Economic Forum, Turkey, with 4.2 points, is ranked 67th among 138 countries in the technological readiness sub-index, falling 3 places compared to the previous year's ranking.

Table 1: Ranking of Indicators in Turkey's Technological Readiness Sub-Index

Indicators	2015	2016	2017
Technological Readiness	55	64	67
Availability of Latest Technologies	45	55	62
Firm-Level Technology Absorption	37	36	48
Foreign Direct Investment and Technology Transfer	28	52	64
Internet Users / 100 Persons	72	67	71
Broadband Internet Subscriptions / 100 Persons	59	61	61
Internet Bandwidth (Kb/Sec Per User)	40	62	59
Broadband Mobile Phone Subscriptions / 100 Persons	62	69	71

Source: The Global Competitiveness Report 2016-2017

According to the Survey on the Use of Information and Communication Technologies by Households and Individuals conducted by Eurostat, The European Statistical Office, 57% of Internet users in Europe are online shoppers. In Turkey, this same rate was 21%.

Table 2: Individual Internet Use and Online Shopping in Europe, 2017 (%)

Country	Internet Use in 12 Months (%)	Online Shopping in 12 Months (%)
European Union Countries	85	57
United Kingdom	95	82
Sweden	97	81
Luxemburg	97	80
Turkey	66	21

Source: Eurostat

According to the 2017 results of the research on the use of information technologies in enterprises and households conducted by TURKSTAT, the rate of individuals buying/selling

goods/services via the Internet (web sites, online stores and mobile applications) and/or Electronic Data Exchange (EDI) in this sector was 11%, while the rate of individuals ordering or buying goods or services on the internet for personal reasons was 25%. In 2016, the latter had been 21%, signifying a 4% increase in one year in the number of individuals who purchased or bought goods or services for personal use over the Internet.

Among a great many producers in Turkey, the number of companies that deliver products to customers via e-commerce is still quite low.

The reasons for this situation can be divided into two categories: the traditional structures of the companies on one side and problems arising from operational processes on the other, these surrounded by other general factors as described below.

- The problems experienced in logistics processes and high freight costs are among the main difficulties encountered in e-commerce.
- In particular SMEs in Anatolia have difficulty in adapting to e-commerce.
- Companies and customers suffer from a lack of knowledge and perception of the opportunities.
- The information and communication technology infrastructure of the companies is not sufficiently developed.
- Consumers think of shopping with credit cards, one of the preferred payment methods frequently used in e-commerce, as a secure method.

2. PROBLEMS DUE TO TRADITIONAL APPROACHES AND SUGGESTIONS FOR SOLUTION

2.1. Classic Structures of Companies

The need to change existing structures and business models and to employ personnel dedicated to e-commerce may create a barrier to e-commerce even for companies which are really interested in e-commerce.

Problems:

- Producers do not have the habit of making sales over the Internet.
- There is a lack of managers who are specialized in e-commerce.
- Companies need to invest in infrastructure to transfer product sales to the virtual environment.

Suggestions for Solution:

- Ensuring coordinated support of state institutions in order to raise awareness and deploy perception-improving efforts regarding e-commerce, such efforts to be deployed all over Turkey
- Ensuring that large retailers adapt to omni-channel marketing and move product sales to the virtual environment
- Developing support programs (such as market penetration, digital marketing support) to enable SMEs to take part in the e-commerce ecosystem
- Organizing training programs able to improve human resources' qualifications required for employees dealing with e-commerce related activities in chambers of commerce, stock exchanges and exporters.

Relevant Institutions

- Republic of Turkey, Ministry of Trade
- Republic of Turkey, Ministry of Industry and Technology
- Union of Chambers and Commodity Exchanges of Turkey
- Exporters' Unions

Corrective Action Taken:

- Awareness and consciousness-raising seminars on e-commerce are being organized by various institutions and platforms in various provinces of the country.

2.2. Lack of Trust

In order to further develop e-commerce in our country and to achieve sustainable results, the problem of trust must be solved in the first place. The trust problem experienced in cross-border e-commerce also includes concerns about the quality of "Made in Turkey" goods. Our country's e-export is likely to fail reaching its potential due to quality related concerns.

Problems:

- The fact that consumers are exposed to fraud in the online environment also negatively affects their behavior when they wish to shop online.
- Consumers are hesitant to buy online products that do not allow for a physical contact.
- Although goods Made in Turkey enjoy a reliable brand perception in Europe, this is not the case in the world at large.

Suggestions for Solution:

- Ensuring that a secure payment infrastructure protects the buyer and the seller, when applicable to e-commerce websites
- Identifying exporters' specialties to differentiate their products from others, also through an international supervising and auditing company, by creating a specific quality certificate.

Relevant Institutions

- Republic of Turkey, Ministry of Trade
- International Surveillance and Certification Companies

Corrective Actions Taken:

- The "Trust Stamp in Electronic Commerce" introduced by the Republic of Turkey Ministry of Trade, is aiming to prevent unregistered and fraudulent companies from trading.
- In 2016, the 'Personal Data Protection Law' has been enforced.
- In order to build and strengthen the image of the "Made in Turkey" brand, the Republic of Turkey, Ministry of Trade, supports companies in their potential to become creators of international brands via its Turquality and Brand Support programs.

2.3. Sales and Marketing Issues

e-Commerce requires both physical marketing and digital marketing in the target markets. The appropriate construction of the marketing activities will make it possible to improve the reach-out to potential customers, as well as to allow websites to reach more and more customers. If the company's website is designed in accordance with the best rules of the digital world, it will transform visitors into customers.

Looking at the companies engaged in e-exports in Turkey, Turkish citizens living abroad appear to be the main customers' segment. The ability of companies to reach a multinational customers' segment and increase customers' volumes is directly related to their capabilities in marketing and sales.

Problem:

- Companies do not pay much attention to personal marketing or one-to-one marketing
- Since search engines need to run a separate sorting algorithm for each country, SEO (Search Engine Optimization) efforts must be done separately for each of the countries which may be the target of the e-export action
- Companies engaged in e-export lack the infrastructure to construct multi-lingual websites, and do not have call centers that are able to answer in multiple languages

Suggestions for Solution:

- Companies engaged in e-export to develop omni-channel strategies
- Moving e-export companies up to the top ranks in online search engines through digital media applications so as to ensure that their products are more visible (SEO)
- Establishing multi-lingual call centers to eliminate the foreign language deficit

Relevant Institution

- Republic of Turkey, Ministry of Trade
- Republic of Turkey, Ministry of Industry and Technology

Corrective Action:

- "Collective Membership Support to access e-Commerce Sites" has initiated,
- The cost of affiliation to certain global e-Commerce platforms have been included in the scope of governmental support measures.

2.4. Payment Systems

The rapid growth of global e-commerce has also led to a rapid increase in online fraud. Special security measures are being developed in various parts of the world in order to combat this threat, notably in developed countries.

On the other hand, the inability to respond to customers' purchase preferences flexibly may lead to sales' losses. Consumer preferences differ from country to country: some prefer credit cards, others the so-called "payment at the door", some others virtual payments. In Turkey, credit cards and installments in payments are frequently used in online shopping.

The e-commerce payment systems infrastructure must be prepared to take into account the buying preferences of the customers, and must at the same time be reliable.

Problems Experienced

- Paypal, a system frequently preferred in cross-border e-commerce, abandoning the Turkish market
- Other than the predominance of Visa and MasterCard in Turkey, one still needs to work with more than one institution, because in many other countries local intermediaries are used; unless the user works with an online payment infrastructure provider that renders service on a global scale, he or she may experience problems in choosing different providers.

Suggestions for Solution:

- Enabling Troy (or similar infrastructure available in Turkey, to also be used in cross-border e-commerce
- Developing alternative payment systems that will enable secure shopping and ease of payment (making the payment after receipt of the product possible, etc.)

Relevant Institutions

- Republic of Turkey, Ministry of Trade
- Banking Regulation and Supervision Agency

Corrective Action Taken:

- In 2016, The Interbank Card Center (BKM) introduced a card payment system named "Troy" as Turkey's Payment Method. It offers an infrastructure that allows cashless payment with Troy-branded debit cards, prepaid cards and credit cards.

2.5. Evaluation of the e-Export Strategy and Action Plan (2018-2020) in terms of Problems Encountered due to Traditional Approaches

Seven strategic objectives have been determined in the framework the e-Export Strategy and Action Plan (2018-2020), which entered into force upon its publication in the Official Gazette Issue 30324 on 6th of February 2018.

It has been found that the following five objectives among the said strategic objectives are related to the issues raised under the heading "problems encountered due to traditional approaches" in our report:

- I. Enabling product security and auditing capabilities with respect to cross-border e-commerce
- II. Enhancing the international competitiveness of domestic firms that carry out e-export activities
- III. Increasing the number of Turkish firms that carry out e-export activities
- IV. Ensuring that micro-entrepreneurs morph into e-exporters
- V. Participating in international collaborations aimed at enhancing e-export activities

I. Enabling product security and auditing capabilities with respect to cross-border e-commerce

The following actions are planned to ensure security in cross-border e-commerce:

- i. The legal environment to protect consumer rights will be developed with respect to products that are subject to e-commerce.*
- ii. An application, such as a sign/stamp environment or similar, in order to improve confidence building measures in e-export, will be introduced.*

While explaining the problems encountered due to "lack of trust" in our report, suggestions for solutions and action plans are also specified.

It is important to focus on secure payment and return processes in particular in the implementation of legal regulations aimed at protecting consumer rights.

e-Export practices planned with confidence building measures may include, inter alia, product quality certificates, developed by international surveillance and audit firms.

II. Enhancing the international competitiveness of domestic firms that carry out e-export activities

The following actions are planned with a view to increasing the international competitiveness of the companies that carry out e-export activities:

- i. Support mechanisms will be developed for the establishment and operation of e-export platforms at international level.*
- ii. Support mechanisms will be developed to ensure that our exporters use international e-commerce platforms effectively.*
- iii. Micro-entrepreneurs will be given support, including consultancy support in the field of e-export, to help them adapt to international competition.*
- iv. Studies and activities aimed at increasing the international recognition / reputation of the companies providing payment services will be supported.*
- v. A support mechanism will be established for introducing local products and handicraft products in cross-border e-commerce.*

The actions planned for the development of international competitiveness are consistent with the solutions proposed under the heading problems encountered due to "classic structures of companies" and "sales and marketing". The support mechanisms to be established by the government are of utmost importance in enhancing both domestic and cross-border e-commerce and in helping exporters to enjoy a fair share of the global e-commerce market.

In terms of the supply of skilled labor, free-of-charge trainings are to be organized by chambers of commerce; exchanges platforms Turkey-wide will allow for a more efficient use of e-commerce platforms by increasing the level of specialization in this area.

On the other hand, focusing on digital media and omni-channel strategies strengthening the sales and marketing potentials of the companies will enable companies to attain a greater share in the international market.

III. Increasing the number of Turkish firms that carry out e-export activities

Increasing the number of e-exporters is one of the strategic objectives: the following actions have been planned in this regard:

- i. A website will be established, containing current information on e-commerce ecosystem in different countries, as well as market and product/product group mappings.*
- ii. Support offices/centers will provide quick and correct information/guidance with regard to matters concerning e-exporters, before and after sales, such as country, customer, language, specific/mandatory practices, etc..*

- iii. *Training and consultancy programs will be organized in order to expand and increase the number of e-exporters throughout the country, and companies will be encouraged to become e-exporters.*

Such action plans have been addressed in this report in the part regarding the problems encountered due to "sales and marketing", and the establishment of multi-lingual call centers has been proposed.

IV. Ensuring that micro-entrepreneurs develop into e-exporters

Within the scope of the strategic objectives, the following action plans have been devised to enable micro entrepreneurs to become e-exporters:

- i. *Micro-entrepreneurs will be informed regularly through an regularly updated portal in the field of e-export.*
- ii. *Activities will be carried out to increase awareness and recognition in e-export.*
- iii. *In order to raise awareness on e-export activities among craftsmen and artisans, an e-export committee will be established during the meeting of the Tradesmen and Craftsmen Council.*
- iv. *Training programs and seminars will be organized to enable women to benefit from the opportunities offered by e-export.*

Proposals for solution have been brought in the section of our report entitled "Problems encountered due to classical structures of the companies", and emphasis has been placed on training.

V. Participating in International Collaborations aimed at enhancing e-export activities

The following action plans have been designed within the scope of the objective of enhancing cooperation environments for exporters and increasing their commercial capacities through multilateral trade agreements.

- i. *In order to facilitate the penetration of SMEs into the market, collaborations will be established with effective e-commerce sites in the countries concerned.*
- ii. *Provisions for developing e-commerce will be inserted in bilateral or multilateral trade agreements.*

Within the framework of these action plans, it may be useful that activities are carried out by DEIK (Foreign Economic Relations Board of Turkey) and particularly the DEIK Logistics Business Council.

3. LOGISTICS PROCESSES, PROBLEMS AND SUGGESTIONS FOR SOLUTION

Logistics processes and costs have an important place among the problems experienced both in domestic and cross-border e-commerce.

Since the delivery period and costs are very important criteria for the e-commerce customer, any increase in costs and delivery delays due to problems experienced in logistics processes may result in customer losses.

Due to the differences in logistics operations, domestic e-commerce logistics and cross-border e-commerce logistics have been discussed and explained separately, whereas solutions have been proposed for the different problems that have been experienced.

3.1. Domestic e-Commerce Logistics

In e-commerce, logistics processes start when the customer places an order for a product via virtual media. Unlike the usual logistical processes, this process does not always end with the delivery of the product to the customer, and the return processes must also be taken into account.

If the companies that carry out e-commerce activities design logistics processes correctly during the setup stage, this will bring cost, control and speed advantages. For this reason, all operational stages in e-commerce logistics, starting with the order and also including product returns, should be planned separately and handled as a whole.

3.1.1. Storage and Stock Control

Product acceptance and quality control examinations in e-commerce orders, systematic racking of products, collection of products according to the order received, barcoding and making the products ready for transportation are all part of the warehouse processes.

Mistakes in warehousing and stock checking may result in the delivery of deficient, damaged products or late delivery; it is essential to install a sustainable and properly-operating system that covers the entire process. Otherwise, protracted delivery periods or deliveries with damaged goods will lead to customer dissatisfaction and losses.

e-Commerce companies may use different methods to ensure product storage and stock control.

As their first choice, companies may use their own warehouses. The primary benefits of warehouses operated by the companies include control, flexibility, lower cost in the long-term, and utilization of existing personnel's skills.¹⁰

With this model, companies may offer faster delivery with the advantage brought by working with an inventory. However, high warehouse investment and operation costs should be taken into account.

On the other hand, e-commerce companies can work without an own inventory by supplying products from outside sources. This method is primarily used by e-commerce sites that offer different products through the same platform.

e-Commerce companies can pick the products when orders are received, or send the ordered products to the customer from the supplier's warehouse directly. However, in this way, delivery periods may be protracted or wrong / deficient products can be shipped.

Another option is to carry out warehouse processes through logistics companies in order to deliver the products to the end-consumer. In this model, logistics companies accept the products, and carry out the necessary checks, inform the companies about the inventory status, and perform the return operations when required.

The companies that do business with the logistics companies gain important advantages, avoid warehouse expenses and execute all processes in a controlled manner.

3.1.2. Distribution and Delivery

One of the areas in the e-commerce markets where the most severe competition is experienced is within the choice of the shipment and delivery options. For this reason, distribution and delivery are among the most important links of the logistics processes in e-commerce.

Late deliveries and damaged products may result in customer dissatisfaction and higher freight costs and this may cause the customers to renounce their purchases.

Right and timely delivery is directly related not only to the technical and infrastructural capacities of the cargo companies, but also timely execution of stages such as product supply, quality control and packaging.

¹⁰ Warehouse and Distribution Center Management, UTIKAD, 2018

Changes have been made recently in the distribution and delivery processes in line with the customer-oriented approach. e-Commerce companies focus on "free delivery" and "same day delivery", and "weekend delivery" options in the delivery of products to the customer.

The delivery times of the cargo companies in Turkey range from 1 - 3 days according to regions, and cargo companies offer the option to track the shipment. Cargo companies that do not have much flexibility due to their structural sizes may face hardship in offering same-day delivery services.

As a result of the customer-oriented approach, the cargo companies that are capable of changing their structure to accommodate the needs and have an agile and flexible organization can increase their market shares in the industry.

3.1.3. Return Processes

In e-commerce, the process does not end up with the delivery of the product to the end-consumer.

The process starting with the receipt of the order by the company and continuing with the delivery of the product to the customer has to be designed correctly so as to cover the product return.

In case of any dissatisfaction, which may be experienced by customers who purchase a product they have seen online, the ability to return the purchased product is an important criterion of choice, and the possibility to be reimbursed in the framework of the "right of withdrawal" is just as important.

A simple, easy-to-understand and shorter return process will have a positive impact on the purchasing behavior, building more confidence in e-commerce, enhancing its success.

In order to reduce returns, it is important to provide the correct information about the product, to manage quality control stages properly, and take measures against problems likely to occur during delivery.

On the other hand, the return processes should be designed properly to include the supplier, and product return costs should be calculated.

3.1.4. Problems Encountered and Suggestions for Solution

The problems experienced with respect to logistics infrastructure and product delivery in particular make it difficult to build a perception of trust in e-commerce. In addition, logistics processes account for a significant part of the costs in e-commerce.

Logistics Costs

Problem:

- In line with the cost-oriented demands of e-commerce companies, the competition based on low prices, which is experienced intensely among freight companies, leads to a decrease in service quality.
- Product returns result in additional freight costs.
- Express cargo companies cannot carry voluminous cargo, and need to transport such products through logistics companies; this, in turn, increases costs
- SMEs do not have full knowledge of the logistics processes applicable to e-commerce.

Suggestions for Solution:

- Forming, deploying and supporting companies producing tailored solutions in the regions where bespoke services are provided and cargo infrastructure fails to meet sufficient standards.

Delivery of Damaged Products or Loss of Products

Problem:

- Damages or losses may occur due to various reasons in the process up to the delivery of products to the end-consumer.

Suggestions for Solution:

- Stressing the importance of staff training to prevent shipments of damaged cargo

Relevant Institution:

- Republic of Turkey, Ministry of Transport and Infrastructure
- Republic of Turkey, Ministry of Trade

3.2. Cross-border E-Commerce Logistics – e-Export

Although the type of export which is prevalent in our country is B2B (business-to-business), a significant increase has been seen recently in B2C (business-to-consumer) trade volumes.

In the e-export model, i.e. businesses selling to foreign end-customers from one's stocks in one's own country or from abroad, the number of online marketplaces, which show increasing numbers in our country, has a great influence.

The models currently in use have different dynamics and different logistic needs.

Since business-to-business product shipments are generally high volume shipments, normal export and logistic methods are used, whereas Electronic Commerce Customs Declaration (ECCD) and micro export method are used for business-to-consumer shipments.

3.2.1. Storage and Stock Control

In e-export, warehouses have a great importance in terms of processes such as packaging, handling and barcoding, and they also account for large part of the logistics costs.

Among warehouse activities inventory management and stock control are critical issues, and the stock control system must have been designed flawlessly to ensure timely delivery of their products to customers.

As in domestic e-commerce, different warehouse preferences can be used in cross-border e-commerce. Despite high costs, companies can carry out their activities in their own warehouses or demand the warehouse processes to be executed by logistics service providers.

Within the scope of the storage service provided by logistics companies, services such as stock control, quality control, barcoding and packaging are also offered.

e-Export companies that receive warehouse services through logistics companies do not have warehouse investment costs, and an integrated control is ensured within the whole process.

3.2.2. Express Cargo Companies and Customs Procedures

In cross-border e-export, express cargo and postal procedures are applied to shipments with a gross weight not exceeding 150 kilograms and a value not exceeding € 7.500.

Shipments above these limits are not carried in the scope of express cargo and conventional export procedures are applied.

All Customs procedures related to the commodities, including Customs declaration, are carried out by authorized operators through indirect representation in accordance with the General Communiqué on Customs (Mail and Express Cargo Carriage) (Serial No: 4) published in the Official Gazette No. 28583, dated 10th of March 2013.

In the scope of the authorization given by this Communiqué, operators that are willing to engage in express cargo carriage by air must have been authorized by the Republic of Turkey, the Ministry of Transport and Infrastructure, Directorate General of Civil Aviation, as "air cargo agents."

Operators that are willing to engage in express cargo carriage by road must have been authorized by the Republic of Turkey, Ministry of Transport and Infrastructure with a certificate of international carriage of goods by road, suitable for the activity that they are going to carry out.

The recognition of express cargo companies as operators with indirect representation power has reduced the burden of exporters, and allowed to carry out procedures such as required by the bureaucracy, including Customs procedures in particular, in a fast, easy and less expensive manner. In this context, such companies carry out operations, including receipt of shipments from customers, labeling, transfer to the export warehouse, submission of Customs declarations (ECCD), carriage and delivery to the recipient.

However, although road transport companies have been authorized, the system has not been integrated: it is not yet possible to issue ECCD in B2C (business-to-consumer) commerce, which is the most frequently used method of e-commerce, by using road transportation.

In e-commerce, in which fast delivery is of essence, ECCD export shipments by international express cargo companies, which involve a transaction fee, must be taken to the export warehouse before being sent abroad, the original documents must be submitted to the Customs administration, and then the export declaration must be lodged.

On the other hand, declarations of any shipment abroad executed by courier's declaration can be submitted 24 hours after the goods have left.

3.2.3. Logistics Costs

In B2C e-export, logistic costs change on a country by country basis.

Below are shown average costs including marketing, logistics and order figures on a regional basis for e-commerce shipments of average size.

Table 3: Average B2C e-Export Costs by Region

Cost	MENA (Middle East and North Africa)	CIS (Commonwealth of Independent States)	Europe
Storage / Order	TL 3.00	TL 3.00	TL 3.00
Handling / Order	TL 1.60	TL 1.60	TL 1.60
Packing / Order	TL 1.60	TL 1.60	TL 1.60
Cargo + Customs Clearance	\$20.00 TL 110	\$17.00 TL 94	\$15.00 TL 83
Marketing	\$47.00 TL 259	\$35.00 TL 193	\$25.00 TL 138
Collection Cost / Order	\$3.68 TL 20	\$1.60 TL 9	\$1.60 TL 9
Customer Services / Order	\$0.60 TL 3	\$0.60 TL 3	\$0.60 TL 3
Total Cost / Order	TL 393.2	TL 304.3	TL 238.3

Source: ETID

3.2.4. Return Procedures

For returned goods to re-enter the country in free circulation (exempt of Customs duties) after the export, the rights and benefits which have been utilized on export must be returned.

After the export procedures conducted via the ECCD system, exporters can get the refund of value-added tax with an ECCD query number. However, in the event that the goods, which have benefited from refund of value added tax, are returned to the country after they have been exported, the value added tax will then be charged.

3.2.5. Problems Encountered and Suggestions for Solution

The problems encountered in cross-border e-commerce are mainly cost-oriented and operational process-oriented.

3.2.5.1. Operational Process-Oriented Problems and Proposals for Solution

The systematic and bureaucratic barriers related to legislation in operational processes prolong the delivery time in e-export where rapid delivery is important, and generate additional costs. The problems experienced in operational issues also negatively affect the international competitiveness of Turkey's e-exports.

Need for Permanent Specialists in Customs

Problem:

- Specialized in ECCD shipments personnel change frequently in the Customs office, then difficulties emerge in operational processes, those who replace them not being familiar with the electronic commerce legislation.

Suggestions for Solution:

- Long-term employment of specialists for ECCD shipments in Customs offices

Relevant Institution:

- Republic of Turkey, Ministry of Trade

Exit of ECCD deliveries is only permitted in Istanbul

Problem:

- Although there are many companies in Turkey, engaged in production and e-export, they cannot send their shipments through the nearest international airports in their regions (e.g. Izmir, Ankara, Adana). Products should first be sent to Istanbul Airports.

Suggestions for Solution:

- Systematic arrangements should be made, allowing direct shipment of ECCD deliveries from international airport Customs in Turkey

Relevant Institution:

- Republic of Turkey, Ministry of Trade
- Republic of Turkey, Ministry of Transport and Infrastructure

Exit Procedures of Micro Export ECCD Shipments

Problem:

- Although the legislation so permits, it is not practically possible to take all ECCD shipments, which have been gathered from all over Turkey, to the export warehouse, to collect the documents and to complete the exit procedures on the same day. This causes a significant portion of the shipments destined abroad to be executed on the following day.
- Resulting from formalities and procedures, shipping abroad with one day's delay constitutes an important disadvantage for Turkish exporters in e-export, where fast delivery is essential.

Suggestions for Solution:

- To allow micro export ECCD shipments to be declared and sent without requiring them to be taken into the central warehouse first, as well as without seeking original documents as usual in several European countries.

Relevant Institution:

- Republic of Turkey, Ministry of Trade

The inability to use ECCD in Carriage by Road in the Scope of Mail and Express Cargo Carriage

Problem:

- With the amendment in the Customs General Communiqué No. 4 (Mail and Express Cargo Carriage), the necessary arrangements have been made to authorize express cargo companies as operators conducting transactions through indirect representation when carrying goods by road. Although this has been included in the legislation, carriage by road by issuing ECCD is still not possible due to the lack of integration among Customs administrations.

Suggestions for Solution:

- Making systematic arrangements that will enable carriage by road and even by sea, whilst issuing ECCD in B2B and B2C commerce, together with the completion of the integration process in Customs

Implementing this amendment would bring cost advantages due to Turkey's location, increasing its e-export capacity; thus the products which could not be sold abroad in the past due to high logistics cost, could eventually penetrate into foreign markets.

Relevant Institution:

- Republic of Turkey, Ministry of Trade
- Republic of Turkey, Ministry of Transport and Infrastructure

Problems Experienced in Returns

Problem:

- The ECCD shipments carried by air are sent to a country as a main destination, and then transported to different places by road and delivered to the end-consumer. Therefore, the shipment reaches the recipient at a different point than the original destination. However, matching different departure and destination points has been an issue.
- In case of shipments containing more than one product, it is not possible to return only part of the shipment (one or more products, but not all).
- Procedural difficulties arise in returning shipments which have been carried by different cargo companies.
- No returns are accepted in e-export shipments falling into the cosmetic products category.
- The return process is delayed as exchange of information between institutions is carried out by means of official documents being sent by regular mail, instead of by electronic media. There has not yet been a completion in the transition to the "Single Window System", which is mentioned in a circular dated 15th December 2017 on Correspondence regarding Goods Returned in the scope of ECCD, in respect of the reduction of the reply period of the tax office in order to benefit from the returned goods exemption.

Suggestions for Solution:

- Discontinuing the habit of requiring that destination and departure points be the same in case of returned e-commerce shipments, in order to allow returns from different countries
- Introducing legislative arrangements to allow the return of cosmetics
- Speeding the procedural process with the Tax Office and Exporters' Unions by ensuring coordination between the two institutions through the system

Relevant Institution:

- Republic of Turkey, Ministry of Trade
- Republic of Turkey, Ministry of Transport and Infrastructure
- Republic of Turkey, Ministry of Treasury and Finance

Problems Experienced with Goods received under the Inward Processing Regime / Temporary Acceptance

Problem:

- Discharging the procedures for the goods received under the inward processing regime and temporary acceptance cannot happen through ECCD.
- The system codes are not suitable for inward processing entry and exit operations in the ECCD.

Suggestions for Solution:

- Allowing a discharge procedure within the scope of ECCD for the goods received under the inward processing regime with temporary acceptance.

Ensuring the exportation of the products covered by inward processing within the scope of ECCD will encourage companies engaged in production in several industrial sites, especially in the textile industry, to enter the international e-commerce market.

Relevant Institution:

- Republic of Turkey, Ministry of Trade

Other Problems

- When erroneous or incomplete address information appears in shipments to countries where the postal code is not sufficiently used, such as the Middle East and North Africa, addresses cannot be ascertained and products are sometimes returned because the ordering party cannot be reached.
- Integration problems may be experienced between domestic and foreign organizations of the cargo companies, and cross-border tracking of cargoes cannot be carried out in an effective manner. Customers who do not get information about the product's position for a long time may be lost.
- Statistics on e-export and ECCD figures are not published on a country by country basis.

3.2.5.2. Cost-Oriented Actions, Problems and Proposals for Solution

Costs in logistics processes affect the purchasing behavior of customers, and the customer can give up placing an online order for a given product due to the increase in costs. Particularly in the case of low price products, logistics service expenses are very high, if compared with the overall value of goods and this constitutes a serious obstacle to e-export.

The total costs of logistics processes (cargo, handling, Customs, etc.) range between 30% and 100% of the production cost of the goods.

Government support is of great importance for reducing logistics costs. In this context, two important actions that can be taken will greatly contribute to reducing logistics costs.

Offering Incentives to e-Export Companies

- Establishing state support to mitigate high freight charges in respect of shipments made within the scope of e-export activities, by paying part of the freight charges with the governmental support
- Including e-exporters in the scope of the freight incentive, to ensure that companies benefit from the incentives and loans provided by banks, whilst integrating them with those provided by the Ministry of Commerce
- Ensuring that digital e-commerce platforms are included in the ECCD system with an ETBIS (Electronic Commerce Information System) number and receive appropriate incentives

Relevant Institution:

- Republic of Turkey, Ministry of Trade
- Republic of Turkey, Ministry of Transport and Infrastructure
- Republic of Turkey, Ministry of Treasury and Finance

Establishment of Distribution and Collection Centers For e-Export Shipments

- Establishing regional collection centers in Turkey and abroad with a view to reducing logistics costs resulting from the distribution of products and returns

Relevant Institution:

- Republic of Turkey, Ministry of Transport and Infrastructure
- Republic of Turkey, Ministry of Trade

Problems vs. Proposals for Solution

The problems that drive the logistics costs up and the suggestions for solutions are illustrated here below.

Warehouse and Storage Fees

Problem:

- In e-export shipments, the products are taken to the export warehouse before being exported and warehouse fees are charged.
- The return transactions made within the scope of e-export can take a long time to be completed, giving rise to high storage fees within the process.

Suggestions for Solution:

- Making arrangements so that the costs generated by the habit of introducing e-export goods into a bonded warehouse before exit are mitigated.
- Granting a 7-day window, free from storage fees in case of returns, so that no charge for storage fee is raised during that period of time

Relevant Institution:

- Republic of Turkey, Ministry of Trade

Problems due to Taxation and Financial Transactions

Problem:

- VAT rates may vary in the countries where the product is shipped. For example, an average 22% VAT rate is applied in Europe. In Turkey only the VAT relating to the product (usually 8%) can be reimbursed in case of returns, and the difference in between is covered by the company.
- e-Invoices cannot be used for ECCD shipments.
- Stamp Tax is charged even for Micro Export ECCD Shipments.

Suggestions for Solution:

- The state should provide incentives to mitigate the VAT differences arising from returns from different countries
- Systematic arrangements should be designed for the use of e-invoices in ECCD

- ECCD transactions should be exempt from Stamp Tax

Relevant Institution:

- Republic of Turkey, Ministry of Trade
- Republic of Turkey, Ministry of Treasury and Finance

Multiple Payment of Universal Postal Service Compensation Fee

Problem:

- Currently, the Universal Postal Service compensation fee, which represents a value of 2,35% charged on the total cost of the international parcel and mail shipments, is paid each time, and separately, by more than one company, and these amounts are met by the end-consumer, eventually lifting the costs of e-commerce.

Suggestions for Solution:

- Ensuring that the Universal Postal Service compensation fee is paid only by the leg of the shipment that corresponds to the domestic side, and that such Universal Postal Service (UPS) contribution can be paid in exemption of VAT.

Relevant Institution:

- Republic of Turkey, Ministry of Transport and Infrastructure
- Republic of Turkey, Ministry of Treasury and Finance

3.3. Evaluation of the e-Export Strategy and Action Plan (2018-2020) in terms of Logistics Processes and Problems

It was found that the two objectives below, among those set out in the framework of the e-Export Strategy and Action Plan (2018-2020), which entered into force upon its publication in the Official Gazette, Issue 30324, on 6th of February 2018, fall within the scope of the operational problems mentioned in our report.

- I. Logistics capacity will be improved.
- II. Customs procedures will be improved within the framework of the needs of cross-border e-commerce

I. Logistics capacity will be improved

In the e-Export Strategy Action Plan, the aim was that Turkey would become a regional e-commerce center, and the following actions have been planned for the development of logistics infrastructure:

- i. The planning, establishment and e-export oriented operation of local and regional logistics centers will be ensured*
- ii. The establishment of supply bases abroad in order to enable fast delivery in e-export and reduce return costs will be supported.*
- iii. International collaborations will be developed to reduce carriage and processing costs in e-export and to improve fast delivery capabilities that will bring a competitive advantage.*

The logistics processes in domestic and cross-border e-commerce and the problems experienced constitute the main theme of our report. Our recommendations regarding the problems encountered in logistics processes include also action plans.

The existence of foreign supply bases, as included in the action plans, is an important criterion to increase the volume of cross-border e-commerce. These supply bases will at the same time serve as centers for distribution and collection, thus accelerating the logistic flows.

Within the scope of the action plan, there are also plans to establish local and regional logistic bases specific to e-export. It is of utmost importance to include local and regional logistic bases in the "Turkey Logistics Master Plan", to prevent that they remain idle and to design them in accordance with the plan.

On the other hand, high freight costs, which emerge especially in cross-border e-commerce shipments, are an obstacle to the increase of e-commerce volumes.

While implementing the actions aimed at enhancing logistics capacity, priorities should include the planning of activities which will drive high freight costs down to reasonable levels. To that end, it will be useful to form a state support mechanism and to explain the principles of such support.

II. Customs procedures will be improved within the framework of the needs of cross-border e-commerce

- i. The practical processes regarding VAT refunds in e-export will be improved, and the necessary facilitation will be provided.*
- ii. The administrative burdens during the receipt of returned products will be eliminated and the implementation processes will be improved by examining international sample cases.*
- iii. Cross-border e-commerce statistics will be created with a view to allowing analysis of the country and the industry.*
- iv. It shall be ensured that the Electronic Commerce Customs Declaration (ECCD) covers all modes of transport.*

Burdensome Customs processes are among the main problems encountered in the cross-border e-commerce logistics. For that reason, the action plans designed for Customs procedures are critical. Our report also focuses on the Customs problems experienced in cross-border e-commerce and addresses proposals for solution in order to increase e-export volume.

Lengthy return procedures are among the main problems experienced in Customs processes. Protracted processing times and increased costs in respect of returned products are an obstacle to increasing the volume of cross-border e-commerce transactions. In addition, the fact that the ECCD taxes paid by the express cargo companies for the returned products are not reimbursed is an important problem increasing the costs for the operators.

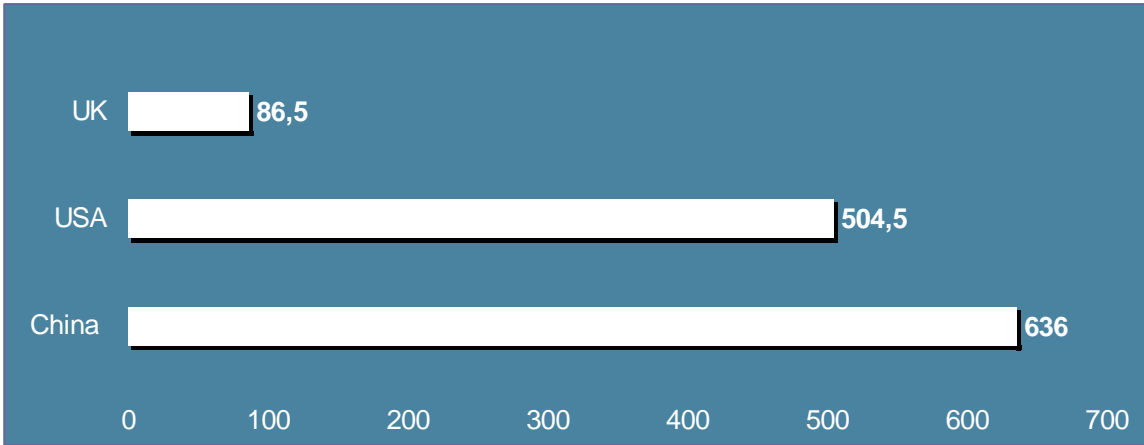
In the current practice, one of the main problems encountered in Customs procedures, which reduce the international competitiveness of the companies in cross-border e-commerce, is created by requiring that the goods which are the subject of cross-border e-commerce under ECCD do not exit the country on the same day, and are first taken to the Customs warehouse; hence shipments can exit the country the next day at the earliest.

4. LEADING COUNTRIES AND SUCCESSFUL PRACTICES IN E-COMMERCE

China, USA and the UK are the countries with the highest volume in the global e-commerce market. China is the world's largest e-commerce market, whereas the USA is ranked second and the UK third. The critical factor for these countries to be ranked at the top in e-commerce is that they host the largest e-commerce platforms in the world.



Figure 2: Countries with the Highest B2C E-Commerce Revenue, 2018 (Million USD)



Source: Statista



Global Retail E-Commerce Index Ranking: 2 / 77.8 Points¹¹
Ratio of E-Commerce to Total GDP: 5.8%¹²
Ratio of Online Retail in Wholesale Retail: 20.4%¹³
Online Shopping Penetration: 83%¹⁴
The Biggest E-Commerce Platform: Alibaba



Global Retail E-Commerce Index Ranking: 1 / 79.3 Points
Ratio of E-Commerce to Total GDP: 2.3%
Ratio of Online Retail in Wholesale Retail: 11.8%
Online Shopping Penetration: 77%
The Biggest E-Commerce Platform: Amazon



Global Retail E-Commerce Index Ranking: 3 / 74.4 Points
Ratio of E-Commerce to Total GDP: 7.9%
Ratio of Online Retail in Wholesale Retail: 15.7%
Online Shopping Penetration: 82%
The Biggest E-Commerce Platform: Ebay

¹¹ The 2015 Global Retail E-Commerce Index™, AT Kearney, 2015

¹² Global B2C E-Commerce Report, Ecommerce Foundation, 2017

¹³ E-Commerce Market Size in Turkey in 2017, TUBISAD, 2018

¹⁴ <https://www.statista.com/statistics/274251/retail-site-penetration-across-markets/>

4.1. China

China is the country with the highest e-commerce market volume in the world. The growth of China in e-commerce has been outstanding due to support by public policies. The government supported the establishment of pilot regions and free zones for cross-border e-commerce, cutting the costs associated with taxes; it also made efforts to improve the domestic distribution network.

Delivery Periods

Deliveries in China are made by local distribution companies. The fact that e-commerce is used increasingly within the country has also been reflected in the logistics processes, and the importance of express delivery has been recognized. In 2015, the average delivery time within the country was found to be 2.6 days.¹⁵

Payment Systems

In China, online payment methods are frequently preferred. For online shopping, 31% of the Chinese customers use online payment methods such as Alipay and PayPal, whereas, respectively, 24% and 22% of the customers use credit card and debit card.¹⁶

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China Identified Pilot Regions for Cross-Border E-Commerce

In China, 7 cities, including Shanghai, Hangzhou and Guangzhou, were designated as cross-border e-commerce pilot regions in 2014 and Hangzhou was the first pilot region to be approved. It is stated that more than 12 cities will be included in the pilot region in 2016.

Each of these regions has an e-commerce platform operated by government-sponsored or licensed companies. Companies can establish warehouses in the region and store there bulk cargoes from abroad temporarily.

An accelerated Customs process is in place in pilot areas. Transactions are completed within 24 hours after the goods have entered the local Customs area. Customs duties are paid after the goods are sold to consumers and leave the pilot area. Transactions carried out in these regions are subject to lower taxation. In pilot areas, the problems arising from foreign language deficit were eliminated, and companies were also required to establish a call center for customer complaints.

¹⁵ China E-Retail Market Report 2016, Deloitte

¹⁶ E-Commerce In China Opportunities For Asian Firms, International Trade Centre (ITC), 2016

¹⁷ US. To China B2c E-Commerce: Improving Logistics To Grow Trade, White Paper, 2016 Stanford Business

4.2. USA

The USA is one of the world's leading countries, dominating the e-commerce market. In reaching this level, not only the Customs organization in the US has been effective, but also the cooperation agreements signed by the Department of Commerce with eBay in 2013, with the aim to 'enhance the US trade and investments further' and the agreements signed by the Chinese Government with Amazon to carry out free zone activities in Shanghai, made also a great contribution. Particularly SMEs have reaped great benefits from these agreements and were able to sell more goods and services.

Delivery Periods

The demand for express delivery in the United States have led companies to focus on the last stage of delivery to the customer, i.e. the 'last mile delivery'. In the USA, the delivery time after the order which was 8 days on average in 2014 was reduced to 5 days in 2017.¹⁸

Payment Systems

There are numerous payment options in the country. In the USA, the most popular payment method in electronic shopping is card payment (credit card and debit card). Card payments are followed by e-wallets (like Apple Pay, Google Wallet).¹⁹

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US gave importance to restructuring in Customs offices

The Customs and Border Protection (CBP) affiliated with the United States Department of Homeland Security established an "e-Commerce and Small Business Branch" in 2016 with a view to simplifying e-commerce Customs procedures and increasing security. The primary objective of the department that supports small and micro enterprises operating in e-commerce is to improve e-commerce and identify unsafe shipments in e-commerce. Also, trainings are organized for SMEs.

Pursuant to the Trade Facilitation and Trade Enforcement Act of 2015, the minimum value of a shipment of merchandise that may be imported without formal Customs procedures, free of duties and taxes, was raised from USD 200 to USD 800 in 2016.

In the scope of the application, no tax is charged for express cargo shipments up to USD 800. Cargo companies issue an electronic declaration about the shipment and the transactions are completed quickly and the products are delivered to the buyer.

¹⁸ US E-Commerce Trends and the Impact on Logistics, ATKearney, 2017

¹⁹ Key Business Drivers and Opportunities in Cross Border E-Commerce 2017, Payvision

²⁰ http://www.wcoomd.org/-/media/wco/public/global/pdf/topics/wto-atf/national-committees-on-trade-facilitation/us_case-study-on-cross-border-e-commerce_en.pdf?la=en

4.3. UK

The UK is the main center of Europe's e-commerce market. The most important factors that drive the growth of e-commerce volume in the UK are the fact that there are reduced barriers and government support for companies to grow, and the fact that retail and wholesale companies perform their sales intensively in the electronic environment.

Delivery Periods

In the UK, most of the e-commerce cargoes (42%) can be delivered the next day. The rate of delivery in 2 to 5 days is 28%, whereas same day delivery rate is 4%. In addition, click and pick is a method frequently preferred by British consumers.²¹

Payment Systems

Although credit card and banks are the preferred methods in e-commerce purchases in the UK, PayPal and similar payment methods are also frequently used. The method of payment at the door is another method used in British e-commerce shopping.²²

UK Developed an e-Export Program

The UK Department for International Trade (UKTI), a governmental enterprise, prepared an e-export package in 2014 for the companies willing to engage in e-export. Within the program which is a first one of its kind in the world, a service package is offered to help businesses of all sizes in the UK to expand their operations, to create their brand and to increase the volume of international e-commerce.

Within the scope of this package international trade consultancy is provided by experts, programs enabling access to new e-market places around the world are offered, companies are allowed to meet digital consultants in UKTI network, and practices such as online communication review designed to increase sales volume in international market are in place. Moreover, relationships are established with the world's leading online markets to enable British companies to export their products to new international markets.

²¹ <https://www.statista.com/statistics/514914/online-retail-purchase-delivery-preference-united-kingdom-uk/>

²² <https://www.statista.com/statistics/435812/e-commerce-popular-payment-methods-uk/>

²³ <https://www.gov.uk/guidance/e-exporting>

5. NEXT GENERATION PRACTICES IN E-COMMERCE LOGISTICS

Fact is that mobile applications are increasingly used in e-commerce and the deployment of platforms supporting omni-channel marketing expands the customer base of e-commerce.

In order to catch up with the speed of the rapidly growing e-commerce, it has become mandatory for all parties involved in e-commerce, notably the logistics industry and retailers, to make technology investments.

In addition, Industry 4.0 has brought along a process where human intervention is minimized, where the logistic processes are completed faster with fewer errors, and with the Internet of Things, systems can now communicate with each other without any intermediary.

Undoubtedly, these innovations also have reflections in e-commerce logistics which targets minimum error and maximum speed. The biggest change is seen in the supply chain links from storage to distribution, and robotic technologies and smart systems are increasingly used in the operational processes.

On the other hand, developing technology has also brought about ways to make customers more satisfied, and secure data transfer methods such as block-chain.

5.1. Smart Supply Chain Practices

Today, companies have started to use and develop intelligent systems in many links of the supply chain, including in particular, demand forecasts, as well as warehouse and stock management.

With smart supply chain applications, companies can respond more quickly to both existing and changing demands. Thanks to these applications, companies can estimate the shopping planned by customers from the searches they conduct online, and initiate the supply chain processes before the order is placed. In this way, when the customer places an order, the product can be delivered to him/her sooner than otherwise possible.

In case of changes in delivery or product quantity, smart systems can instantaneously step in, and customer satisfaction can be achieved through the alternatives produced.

Warehouses Equipped with Smart Systems

The fact that artificial intelligence, smart systems and software are increasingly used especially in the warehouses provides companies with both cost and time savings.

Thanks to digital coding and advanced software, human errors can be minimized. With the use of smart software for receiving online orders, preparing orders, packaging, delivery and post-delivery returns, it is possible to prevent the delivery of the wrong products to the customer, and to ensure that products are delivered to the customer much faster.

With the systems used for inventory management, which is crucial in warehouse processes, it is possible to have a properly-functioning stock control system, and estimations can be made about the exhaustion speed of products, so as to prevent running out of stocks by planning the product supply.

In addition, the use of smart warehouses capable of working 24 hours a day without any shifts in the staff employed will contribute to decreasing in the completion time of logistics activities whilst increasing volumes.

Order Processing and Distribution Centers (Fulfillment Centers)

From the customer's point of view, order processing centers and distribution centers (fulfillment centers), equipped with state-of-the-art technology and robotic features, where services such as warehousing, packaging, shipment and coordination can be performed, are more and more common.

Unlike conventional warehouses, value added services are offered in distribution centers. In a well-organized and well-managed fulfillment center, services required to complete the order cycle, such as order processing, order preparation, shipment, goods acceptance, processing of returned products are offered with performance management, without forgetting that services such as transportation, cross-shipment, order fulfillment, packaging and labeling, are also offered.²⁴

These centers provide great support particularly to SMEs, which do not have sufficient facilities, to prepare their products on time and to increase their e-commerce volume.

²⁴ Warehouse and Distribution Center Management, UTIKAD, 2018

5.2. Changing Delivery Methods

In e-commerce, the first priority of the customer is fast and inexpensive delivery.

e-Commerce platforms, retailers and logistics companies all shape their activities by targeting the expectations of their customers. In this context, new delivery methods have emerged besides traditional delivery methods, with the support of technological facilities and intelligent systems.

Delivery via Couriers

Despite the frequent use of other cargo companies in e-commerce logistics, delivery by courier has also become prominent. Several e-commerce companies prefer courier companies to deliver their products faster to their customers. Also, the reasons for preferring courier companies include, amongst others, options such as late delivery, weekend delivery, etc.

Another method, the infrastructure of which is now being built and estimated to become widespread in the future, is the crowd-sourced delivery, also called “second generation courier service”.

In the case of crowd-sourced delivery, there is a UBER-like structure which offers private vehicle services with private drivers in urban transportation. People can register into the platform as drivers, select the products they will deliver on the platform and deliver the products they choose to the consignee.

This method offers a cost advantage particularly to those companies that face fluctuations in demand. Because many people with vehicles can register into the system, the system also creates resources.²⁵

Delivery by Drone

For faster delivery, large e-commerce companies are aiming at delivery in the shortest possible time, even exceeding same day delivery transit times. For this purpose, e-commerce giants such as Amazon are focusing on fast delivery methods lasting 1 hour or even 30 minutes by using drones.

In case of delivery with a drone, delivery is made directly from the product distribution centers to the delivery addresses at a lower cost and with less logistics efforts.

²⁵ Parcel Delivery The Future of Last Mile, McKinsey&Company, 2016

Click and Pick

Some e-commerce companies which have physical stores tend to use the "click and pick" option, i.e. their customers choose the products they like, then come to the store and take home the goods in a faster manner and without freight costs. Customers can check the stocks through web integrated systems, and pick the products they want directly from the stores.

5.3. Smart Customer Relations Management

The growing number of e-commerce users creates a market which requires a well-functioning customer service mechanism for customers to resort to for all questions and problems.

Smart systems that are integrated in every field of e-commerce can be used in customer relations. With the help of voice command and robot secretaries, customers can be offered faster solutions on matters such as stock status, delivery and return during both the ordering stage and the post-order phase.

5.4. Block-chain Technology

The Block-chain Technology helps to eliminate the existing concerns over security in e-commerce. Thanks to Block-chain, transactions can be performed reliably in the digital environment and information is protected by passwords that are developed using advanced technology.

Smart contracts that are prepared with Block-chain can be signed electronically. As with any contract, intelligent contracts contain agreed conditions for the supply and delivery of products, thus all processes can be carried out automatically. When the conditions are duly fulfilled, payment is made automatically to the payee. Therefore, many problems such as late payments, delivery disputes and fraud, can be eliminated.²⁶

²⁶ Key to E-commerce: Warehouse Management and Logistics, The Era of E-Commerce Magazine, 2017

CONCLUSION

Turkey has a significant potential in domestic e-commerce and cross-border e-commerce. If Turkey takes steps to unfold and improve its potential, this will contribute to the expansion of the export arena, supporting the achievement of the export targets for 2023.

Awareness raising efforts, training programs and technology investments are the prominent activities which will help eliminate the problems experienced due to the traditional approaches of the companies, which is one of the factors preventing the development of domestic and cross-border e-commerce. In addition, the formation of multi-lingual call centers which will serve e-export companies in several languages is also important.

Legislative arrangements and simplification of bureaucratic process are also needed for the solution of operational problems, especially those in logistics processes. At this point, it is very important to include e-export within the scope of the incentives present in our country, similarly to countries with a good track-record in e-export.

The government support to be offered, in many aspects from cargo costs to taxes, will make a direct impact on increasing Turkey's e-commerce volume. Considering the companies engaged in e-export activities as exporters and letting them benefit from the incentives offered to exporters are important steps that need be taken in this regard.

The international competitiveness of the companies will be enhanced by making the necessary arrangements regarding the exit declarations: these need be carried out by submitting Electronic Commerce Customs Declaration (ECCD) in e-export shipments, by issuing systematic arrangements, which will allow ECCD also in road transport carriage, and by improving and expediting the processes concerning the return of products.

On the other hand, the implementation of the objectives included in the e-Export Strategy and Action Plan as practicably as possible will also play an important role in increasing the e-export capacity.

Another noteworthy point mentioned in the e-Export Strategy and Action Plan regards the plans for establishing local and regional logistic centers specific to e-export. It is crucial that such logistic bases are planned in the framework of the "Turkey Logistics Master Plan" and the locations of these bases are identified in a suitable manner to serve the purpose.

According to one of the clauses in the action plan, it shall be ensured that the Electronic Commerce Customs Declaration (ECCD) shall cover all modes of transport. In current practice, a majority of the cross-border e-commerce shipments is carried by air, and if the scope of ECCD is expanded to cover all modes of transport, carriage by sea will be frequently preferred because of the cost advantage it brings. For this reason, it is important to ensure that the centers to be established are situated in a location convenient for carriage by sea as well as by air, and also have access to international road and railway networks.

It is essential that logistics bases also function as distribution and collection centers. If these bases offer logistics services, technology-based services and multi-lingual call centers, activities that should be supported and granted certain exemptions by the government as in the leading countries in e-export, this will provide added value and improve e-commerce.

Reference to the "Management, Establishment Methodology and Performance Indicators of the Logistics Centers", published by UTIKAD in 2014 and "Warehouse and Distribution Center Management", published in 2018, may be useful in the planning stage of these centers.

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