## Influence of new customs procedures and logistic security standards on companies competiveness - a Croatian company case study

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# INFLUENCE OF NEW CUSTOMS PROCEDURES AND LOGISTIC SECURITY STANDARDS ON COMPANIES COMPETIVENESS – A CROATIAN COMPANY CASE STUDY\*

#### ABSTRACT

In today's global market, companies are constantly confronted with the competition on the local, national and international level. Companies therefore use a variety of strategies and tools to become and/or remain competitive. Potential areas for cost reduction in companies are supply chain management and logistic and customs procedures. Implementation of various logistic standards in supply chain management can provide significant cost savings for the company's daily operations and thus reduce overall costs and improve the competitiveness.

Using different customs procedures and logistic standards to reduce their costs and become more competitive in the market is necessary for Croatian companies. The method of using these tools is not a one-time process and requires constant efforts. Companies therefore have to be ready to improve daily to be and remain competitive. Using a variety of modern customs procedures can save their money and time, not only through these procedures, but also through better use of their employee's time, their own vehicles and other equipment.

The paper analyzes various customs procedures and logistic standards that can help companies save time and money and improve their competitiveness. In the example of Croatian company, which uses various available procedures and standards the benefits of their use are shown. Apart from bringing savings in operations, all these procedures and standards allow the company to be better, cheaper and more attractive to buyers.

Keywords: customs procedure, logistic standards, supply chain management, savings, competitiveness

#### 1. Introduction

Today's economy is marked with higher competition that it ever was. Competitiveness on every level of market - local, regional, national and international is one of the major tasks of every company. Therefore companies that are present on today's global market are using different strategies, tools and activities in order to gain their competitive advantage and to remain competitive. They are trying to find all possible opportunities inside their organization and as well to use different activities in their environment. Technology development and safety issues in the last few years were main driving force for introducing new logistic standards and customs procedures that can effect different activities of companies and result in increased competitiveness. Trade facilitation is of utmost importance for development. It can improve countries' competitiveness through trade of goods and services with lover transaction costs. On the other side, inefficient customs and logistic procedures can create obstacles to trade and make hard for countries to improve their competitiveness on global market.

Influence of the logistic standards and customs procedures on company's competitiveness has been previously researched (Chopra, Meindl, 2004; Bloomberg, LeMay, Hanna, 2006; Arvis et al., 2014) but there has not been similar research in Croatia. Most authors were researching only one part – logistic standards or customs procedures. Therefore this paper will try to answer if the use of modern logistic standards and customs procedures can increase company's competitiveness or not. Some Croatian authors (Erceg, Orešković, 2010; Horvat 2010; Tomašević, 2011) researched benefits of customs procedures usage for the company. Based on this previous researches it is possible to set proposition that use of modern logistic standards and customs procedures can influence company's competitiveness.

In the first part of paper different customs procedures and logistic standards that are available today for companies will be presented. In the second part of paper we will present one Croatian company that is using different customs procedures and logistic standards in order to become more competitive on the markets where they are present.

#### 2. Logistic security standards

Banomyong (2010: 29) stated that development of logistic services and communication technologies has revolutionized production and distribution processes and created a 'global' market. All companies from shippers to final consignees demand efficient logistic services which can transport their material and products from their origin to the final and, most important, right destination, at the right time, in the right condition, and at the right price. Companies today invest their efforts in order to apply for different logistic standards which will enable them to do their business faster and more efficient. Stock, Greis and Kasarda (1998) found that competition today moves from head-to-head between companies to competition between supply chains and therefore competitive success will depend more and more on companies' logistic activities. This move is influencing the view on logistic, supply chains and logistic standards that companies have and gives higher importance of this field to the company managers. Policymakers around world recognized logistic sector as one of the most important for further growth since improvement of performance in logistic and supply chain is core of the competitiveness agenda and economic growth. (Arvis et al., 2014)

Besides need for speed and improvement in logistic and supply chains, due to the security reasons and especially after "nine eleven" events in USA, companies have to act in relation to different logistic security standards. These standards among others include USA's Customs-Trade Partnership Against Terrorism – C-TPAT, the European Union's Security Amendment to the Customs Code, the Australian Frontline program, and the World Customs Organization's (WCO) SAFE framework of standards to secure and facilitate global trade (Grainger, 2007). These new standards are mostly brought by different intergovernmental and private organizations (Szelp, 2010) which are involved in worldwide logistics and supply chain networks. Main objective of WCO's SAFE framework is to facilitate global trade and to promote seamless movement of goods through international trade and to establish cooperative agreements between trade agencies and Customs (Tweedle, 2008). The importance of SAFE framework can be seen in fact that customs administration is encouraged to look beyond their traditional role of national borders keeper and to become trade facilitator (Widdowson, 2007). Guiterez and Hintsa (2006) identified four groups of voluntary supply chain programs. (Table 1)

In the first group customs is aiming to streamline all procedures to compliant companies and due to the security concern an additional security layer has been added. With this, certified companies present lower risk and are compliant for customs. The second group was created under the influence of terrorist attacks and all security measures are aimed to transfer some customs responsibilities to companies in order to detect potential illegal activities. These standards have become first steps for being part of other customs programs. In the third group are programs that are trying to set supply chain security standards which are intended for whole participants in trading activities. The last group targets protection of goods from being illegally removed and/or tampered with and looks for all potential illegal activities in managing private companies different cargo operations. Logistic security standards and programs help companies and countries in lowering logistic costs because inefficient logistic and supply chains increase trading costs and therefore lower companies' competitiveness.

Table 1 Identified types of voluntary supply chain security programs

#### 3. Customs procedures

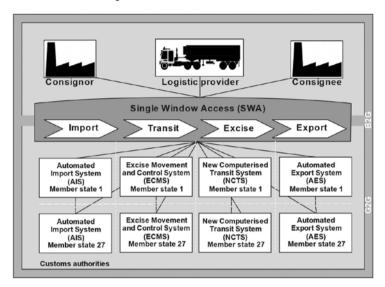
According to customs definition Zhang (2002: 89) noted that customs administration performs following basic functions: trade facilitation, and customs control. Second function includes prevention of the different hazardous materials, interdiction of prohibited substances, intellectual property rights protection and especially tariff collection. Horvat (2011) stated that customs was always country's service for collecting customs and excise duties. Traditional responsibilities of customs administration were different from one to another country, and often were subject of regular reviews and modification to ensure their relevance in a constantly changing world (Widowsson, 2007).

During last few decades, customs administration underwent significant changes from its traditional role as keeper of country's borders. Gordham (2007) found that these changes were influenced by: growth of international trade, reduced tariff and non-tariff barriers, new models of logistic and the supply chain, and increasing use of the information and communication technology (ICT) in international trade operations. Elmane-Helmane and Ketners (2012) concluded that efficient customs procedures increasingly contribute to country's competitiveness and participation of its companies in global trade. Due to the e-commerce development, customs administration has become more important and complex and now it has some new functions like: safeguard, legal merchandising, statistic and fiscal function.

Voluntary supply chain security programs					
Customs compliance programs to which the security layer has been added Examples: PIP (Canada), StairSec (Sweden), ACP & Frontline* (Australia), AEO (EU)	Government origin, pure security programs Examples: C-TPAT (USA), Secured Export Partnership (New Zealand)	International organization origin, security standards programs  Examples: WCO framework of standards, ISO (International organization for standardization)	Private origin, pure security programs Examples: BASC (Latin America), TAPA (technology companies)		

Source: adapted from Guiterez and Hintsa (2006: 3)

Figure 1 Single Window Access concept



Source: adapted from Vogel, T., Schmidt, A., Lemm, A., Osterle, H. (2008), "Service and Document Based Interoperability for European eCustoms Solutions", Journal of Theoretical and Applied Electronic Commerce Research, Electronic Version, Vol. 3, No. 3, pp. 17-37.

The European Commission (EC) initiated e-Customs project for several reasons. One was to replace paper procedure with electronic ones and with that creating more efficient and modern customs environment. Tomašević (2014) stated that the second one was to save entrepreneurs money and time, increase the competitiveness of European businesses and with that to improve main targets of EU growth strategy. With e-Customs project the European Union (EU) invested efforts in order to facilitate trade using information and communication technologies (ICT).

The European Commission (2012) presented Single Window Access (SWA) and its main part of program "Multi-Annual Strategic Plan" (MASP). This program is intended for creation of a paperless simple environment for trade and customs activities. (Figure 1) Butterfly (2003: 2) defined SWA as a system that allows traders to lodge information with a single body to fulfill all import- or export-related regulatory requirements.

Companies and government can have additional advantages regarding foreign trade and competitiveness from SWA mechanism. (Table 2)

With SWA all involved parties will have full access to one electronic point for all activities during international trade – import, transit, excise and export no matter in which member state their activity starts or ends.

Table 2 SWA advantages

•	
For the government	For companies
Improvement in effectiveness and efficiency resources	Cost associated with delays is reduced
Better yield in tax collection	Faster release of merchandise
Raises user satisfaction	Clearer and more predictable rules
Better security	Improvement in effectiveness and efficiency resources
More transparent information from users	More transparent information from government

Elorza, J. C. (2012), "International Trade Single Window. Requirements for a successful implementation in Latin America", Public Policy and Productive Transformation Series Corporación Andina de Fomento, Colombia, pp. 15

SWA concept will allow a single point of access for all current and future EU member states customs ICT systems. This will be achieved through integration of customs procedures and systems such as the New Computerized Transit System (NCTS), Automated Export System (AES), Automated Import System (AIS) and Excise Movement and Control System (EMCS) (Vogel, 2008).

Croatian Customs Administration carries out the prescribed measures and actions for the purpose of insurance, protection and security market and society and creating the most favorable conditions for economic development and trade facilitation. They also perform determining the payment of customs duties, excise taxes, excise duties, value added tax and other mandatory public administration, implemented measures of customs and excise supervision and checking of all significant facts for customs or taxation of goods, as well as other activities her customs, tax and other regulations put in competence and enhancing the competitiveness of the national economy. Customs Administration has provided the conditions for the effective functioning of the internal market of the European Union, spending the proper application of the common customs, trade, agricultural policy and fisheries policy, with effective control over the external borders of the European Union. They have started with implementation of some parts of SWA and e-Customs procedures - mainly NCTS and ECMS.

#### 4. How can logistic security standards and customs procedures influence competitiveness?

Influence of logistic on competitiveness was object of many research papers until now. Chopra and Meindl (2004) concluded that company can have cost advantage in relation to competition by managing logistic improvement and costs while Blomberg, LeMay and Hanna (2006) stated that competitive advantage created by logistic is hard to be copied by any other competitor. Logistic can help in reaching competitive advantage through finding strategy which will keep business away from substitute market and endure market position based on value and cost advantage. It is necessary to influence on internal logistic factors that are helping in reaching logistic goals: strategic goals, technology, human re-

sources and ICT (Golenić, 2013). This approach to logistic can help in minimizing costs and maximizing efficiency and profits for the company and with that increasing competitiveness.

In today's global world and market major concern for all stakeholders is reliability of supply chain. Consignees asked for more certainty and more security when and how its shipment will take place. This situation is increasing demand for excellent logistic providers and services and creates challenges for both governments and logistic agents in order to facilitate trade and safeguard public against all possible risks - terrorism, criminal and health concerns. Performance in logistic activities and reliability of supply chains are associated and also predictability of service deliveries for producers and exporters. (Arvis et al., 2014) Today's supply chains are more complex and cover many countries but they remain of great significance for national competitiveness. Therefore reforms and long-term commitments from all stakeholders – privates ones and policymakers - are of great significance.

On the other side, customs administration can improve economic competitiveness in a number of ways, one of which is by implementing trade facilitation measures for legitimate and compliant traders. Innovative cross-cutting solutions for expeditious and effective completion of border formalities can propel economic growth. Therefore designing and implementing practical programs which can create positive difference to national competitiveness is conditional on governments giving priority to border management reform and modernization (Hoekman, 2011: IV). Libby (2011) found that in countries that have implemented SWA users have stated among other following benefits: reductions in the cost of their customs dispatchers traveling from one institution to another; economies of scale in investments and technological maintenance; statistical control of public and private commercial decisions and transparency and financial security in the use of electronic payments; a reduction in the time needed for obtaining permits and licenses and most important simplification of procedures for everyone involved. Successful border management is very important in order to minimize or even eliminate avoidable delays and enhance predictability in customs clearance on borders. Arvis et al. (2014) concluded that the need for coordination between different government agencies will be of utmost importance for trade facilitation efforts together with

application of best practices in risk management in non-customs agencies.

In Croatia, Customs administration strategy (CURH, 2014) was brought in order to continue modernization of Customs administration inside European Union. Among other this strategy is based on international trade development which is followed with further changes in goods movement and need in facilitating legitimate trade through simplifying customs formalities in order to lower the costs related to customs procedures. This can result in higher competitiveness of companies and customs procedures through selective controls that are based on risk analysis, ICT usage, and later inspection and verification activities.

#### 5. Methodology

The paper aims to identify influence of the new customs procedures and logistic security standards on company's competitiveness. In order to evaluate possible influence of this procedures value stream mapping as one of the lean thinking tools, case study and descriptive methods were used. Value stream mapping (VSM) is visualization tool that helps to understand the current state of activities inside the system. Mapping out the activities in the manufacturing or service process with cycle times, in-process inventory and information flow paths, helps to visualize the current state of process activities and guides to future desired state. This procedure provides insight on losses / waste and opportunities for improvement. We have used VSM on all new customs procedures and logistic security standards in our case study company in order to measure their influence on company's processes and possibility to save time and money. Analysis of data collected for each procedure (customs and logistic), in many cases from the case study company can determine the areas of competitiveness improvement.

The case study method relates to the collection and presentation of detailed information about a particular problem. It is a form of qualitative descriptive research. The case method is built around the concept of metaphor and simulation. Case study method was used in order to show influence of the procedures to one successful Croatian company's competitiveness.

### 6. Using customs procedures and logistic standards to be more competitive – a Croatian production company case study

Sjaj d.d. is a Croatian company with long tradition and existence which produces household detergents, toiletries and cosmetics and products for industry and institutions. In the last several years Sjaj continuously has increased production and sales – from 24,000 tons in 1998 to 91,000 tons of all products in 2013. During that period there has not been drastic reduction in number of employees – number of employees decreased for 10%. In order to be successful company had to look for every way to be more competitive and to offer their products to consumers with affordable price and excellent price/quality ratio.

In previous times company has used different customs procedures – such as production with suspended customs payment and authorized consignee – in order to be more competitive. First procedure allowed company to import material and to pay only value added tax (VAT) while the customs has been suspended. In order not to pay customs company had to export final products made of the material imported with suspended customs duty payment. This procedure was used for several years – from 1995 until 2000 – and during that period company had significant savings. Company decided to stop using this procedure when all customs duties for its raw materials were lowered to 0% in year 2000.

Second procedure was authorized consignee which company uses for more than 10 years and company had savings in logistic costs – vehicle times and customs procedure costs (Erceg and Orešković, 2010). This procedure allows company's trucks to go directly to company warehouses for unloading and save significant money – 15 EUR/truck or shipment – since trucks don't have to go to customs terminal and pay terminal entry ticket. Sjaj is still using this procedure and is saving time and money. (Table 3)

Total saving for terminal entry ticket based on authorized importer procedure in the last three years was EUR 66,750.00. The number of shipment in the last two years is lower due to the fact that Croatia joined EU and there is no more customs clearance for the goods coming from EU. Besides direct money saving company had also saving in workers time, trucks time and better allocation as well as possibility to have just-in-time deliveries of the material

which was able to be delivered even after the customs office's working hours.

In the recent times company has started to use several new e-customs procedures (NCTS, ECMS) and one logistic security procedure (Authorized Economic Operator - AEO). These new procedures and its financial and other benefits for Sjaj will be presented in next part of paper.

Table 3 Authorized importer savings

Year	Number of trucks/shi- pments	Savings in EUR
2012	2,500	37,500.00
2013	1,600	24,000.00
2014 (till 30.06.)	350	5,250.00
Total		66,750.00

Source: Author

#### 6.1. New Computerized Transit System

New Computerized Transit System (NCTS) is an electronic system which enables a transit system for shipment from starting to delivery point no matter if the starting or delivery point are one of the EU member states or one of the countries which signed the Common transit system convention.

#### Table 4 NCTS savings

\* Average 15 minutes per shipment – based on information from Croatian Customs administration \*\* According to Croatian bureau of statistics (2014) and 168 working hours per month, 1 EUR = 7.6 HRK

Main implementation goals of this procedure are as follows: the increase of the efficiency and effectiveness in a transit procedure; the improvement of prevention and fraud detection; the acceleration and security of carried transactions in a transit procedure (European Community 2001, CURH 2010) and its main task is control of goods movements within EU that are not in free circulation - i.e. import duties and taxes are not paid. Process includes Electronic Data Interchange (EDI) of customs declaration for transit procedure, implementation of transit procedures in shipping, delivery and transit customs office and a management of guarantees for transit operations, search procedures and collection of customs duty, when the transit procedure is not completed in a prescribed manner, and some of the activities between customs representatives and entrepreneurs. Tomašević (2011) concluded that this procedure includes all electronic messages that are needed to start and conclude a transit procedure without any paper documents while Doyle and Janssens (2011) found that the implementation of the NCTS in EU has obtained a productivity gain of about 30 minutes per shipment. NCTS became obligatory in Croatia for all stakeholders in foreign trade from August 1, 2011 so Sjaj had to start using this procedure. (Table 4)

Sjaj had direct savings of almost 6,000.00 EUR from faster customs declaration creation — average 15 minutes per truck/shipment. Beside this there is also saving in time through shorter transit time and earlier release of truck which is creating opportunities for increased vehicle utilization. Lower savings in 2013 was influenced by Croatia entering the EU and the fact that Sjaj purchases a lot of raw materials from the EU so there was no need for customs clearance any more.

Year	Number of deliveries	Total time saving (hours)*	Price of hour (EUR)**	Total savings (EUR)
2011 (from 1.8.)	1,050	262.50	4.26	1,118.25
2012	2,500	625	4.28	2,675.00
2013	1,600	400	4.32	1,728.00
2014 (till 30.6.) 350		87.50	4.30	376.25
Total		_		5,897.50

Source: Author

Table 5 EMCS savings

	Number of de- liveries / year	Input of data min/delivery	Workforce cost @ 4.30 EUR/ hour	Postal costs @ 10.00 EUR/delivery	Total cost (EUR)
Before EMCS	20	15	21.50	200.00	221.50
After EMCS	20	4	5.70	0	5.70
Total savings					215.80

Source: Author

The Company has additional savings since there is no more need for issuing paper documentation on border crossings and with that it is possible to save additional average amount of 30.00 EUR per truck/ shipment. Savings on paper documentation can significantly lower the costs for companies that have several imports and/export procedures per day.

#### 6.2. Excise Control Movement System

According to a European Council (2008) directive from April 1, 2010 a new system of excise movement and control system is operational and compulsory for all excises under duty suspension movements. New system's name is Excise movement and control system (EMCS). This computerized system is created with intention to prevent fraud by monitoring movements of excise goods under suspension of excise duty within the EU, i.e. for which no excise duties have yet been paid. It has replaced paper document that had to accompany such movements with electronic messages from the consignor to the consignee via member state administrations. According to Vatuiu et al. (2010) EMCS implementation has certain advantages for involved parties and those include simplified procedure, paperless administration, more secure movement of excise goods, faster release of traders guarantee and effective monitoring with real time information and possible checks during movement. Modernization of procedural requirements will also allow reduction of the administrative burden for companies and administrations, and possibility of EMCS integration within company's information system.

Sjaj has applied for this customs procedure as soon as Croatia joined EU.

The Company got excise authorized receiver number and with that authorization was allowed to buy excise goods in excise duty suspense system. Saving that came from EMCS procedure can be seen in Table 5.

EMCS brings financial saving to Sjaj which are not big but in case there are more deliveries, savings would be higher. Besides financial savings EMCS allows company to enter excise goods under suspension of excise duties so company doesn't need to pay excise at once but only when the final product is sold to the final user. In case the goods are exported to out of EU than there is no need to pay excise at all. For the Sjaj which exports 50% of its final products this also creates financial savings. Due to the further tools which will be implemented in e-excise system in Croatia from September 1, 2014, Sjaj will be able to achieve additional savings.

#### 6.3. Authorized Economic Operator

Authorized Economic Operator (AEO) certificate can be granted to any company that is meeting following criteria (Urcioli and Erkwall, 2009) record of compliance with customs requirements; satisfactory system of managing commercial and, where appropriate, transport records, which allows appropriate customs controls; proven financial solvency and where appropriate, security and safety standards. Since there are three possible AEO certificate available (AEO customs, AEO security, and AEO customs and security) company can decide which one will suit best to its need based on potential benefits and requirements. AEO became available to Croatian companies from the moment Croatia joined EU. First applications for AEO started in autumn of 2013 and according to Croatian Customs administration around 25 companies applied for the certificate and until July 2014 only 5 certificates were awarded since the process is lasting 6 months.

Table 6 AEO savings in 2014

			Number of controls (monthly)	Duration (Hours)	Price of hour (EUR)	Total cost (EUR) per month
Before AEO	Physical controls	Import	5	10	4.30	43.00
		Export	10	20		86.00
	Documentary control	Import	15	30		129.00
		Export	30	30		129.00
	Physical controls	Import	2	4	4.30	17.20
After AEO		Export	4	8		34.40
	Documentary control	Import	8	8		34.40
		Export	10	10		43.00
Total saving (Cost before – Cost after) per month					258.00	
Total savings per year				3,096.00		

Source: Author

Sjaj has applied for AEO customs certificate – that is allowing customs simplifications, less document and physical customs control in relation to other economic operators, priority treatment if there is control and possibility to request a specific place for such control. AEOC certificate was awarded to Sjaj in May 2014. Awarded certificate brought certain financial savings to company. (Table 6)

Sjaj is using financial benefit from AEO – company doesn't need to present bank guarantee for securing payment of customs dues and instead it can use promissory note. Company previously used to have bank guarantee in amount of 135,000.00 EUR. For the bank guarantee yearly cost was 4,050.00 EUR (1,012.50 EUR maintenance cost per quarter) and additional 540.00 EUR for issuing. With AEO certificate this amount is saved. Besides time savings and money savings, additional possible savings from AEO certificate should be looked upon and monitored in future since Sjaj was awarded with AEO certificate in May 2014 and there could be future savings from use of this logistic safety standard.

#### 7. Conclusion

Use of modern logistic safety standards, supply chain management and customs procedures enables companies to find additional savings in order to be more competitive on today's global market. In the recent time we are witnessing measures of trade facilitation concepts that are trying to improve aspects of supply chains on all levels - from local to global. These concepts involve different reforms in operations management on and after borders and include logistic operations and procedures of border regulations. These barriers and their reduction are crucial for increase of competitiveness of countries and their companies. Activities include different stakeholders from governments to private companies and not only the ones that are part of different supply chains.

There are several logistic security standards and customs procedures intended for companies upon which customs can base part of their obligations, and on the other hand help those certified companies to become more competitive in reducing time for customs procedures, lowering the administration burden, etc.

The paper has discussed an example of a Croatian company Sjaj that is using modern customs procedures and logistic standards. In its search to increase its competitiveness on the market Sjaj is looking for every potential saving in its business processes.

This is done for every business procedure and not only for its core activities. The company is using logistic safety standards and customs procedures that allow financial savings as well as time savings and better utilization of its vehicles. As a consequence, the company is gaining competitive advantage through this as well. Although savings do not look big on the financial side, these savings are direct profit for the company and they can be reinvested in other activities like research and development, marketing, sales promotion, etc. These can also increase the company's market competitiveness. The company Sjaj will continue to look for possible savings from any new logistic and customs procedure which will help improve their performance and competitiveness. The results from the presented case study indicate that it is possible to confirm the proposition that new customs procedures and logistic security standards can help companies in increasing their competitiveness on the market and making them better, nicer, cheaper and ultimately more attractive to their buyers.

Further research on the influence of customs procedures and logistic security standards should be conducted on a bigger sample. This study should be carried out in two groups, one comprising small and medium-sized entrepreneurs, whereas national and multinational companies should be in the other group. This study would aim to establish whether these customs procedures and logistic standards have the same influence on competitiveness of companies with different sizes.

#### REFERENCES

- Arvis, J-F., Saslavsky, D., Ojala, L., Shepherd, B., Busch, C., Raj, A. (eds.) (2014). Connecting to Compete 2014: Trade Logistic in the Global Economy, The International Bank for Reconstruction and Development/The World Bank.
- 2. Banomyong, R. (2010), "Benchmarking Economic Corridors logistic performance: a GMS border crossing observation", World Customs Journal, Vol. 4, No.1, pp. 29-38.
- 3. Bloomberg, D. J., LeMay, S., Hanna, J. B. (2006). Logistika (Logistic), Zagreb: MATE.
- 4. Butterfly, T. (2003), "The Single Window Concept", United Nations Economic Commission for Europe, Available at: http://ec.europa.eu/taxation\_customs/resources/documents/customs/policy\_issues/e-customs initiative/ind projects/swannexv.pdf (Accessed on: July 5, 2014)
- 5. Carinska Uprava Republike Hrvatske, (2010), Priručnik o provozu (Transit handbook), Available at: http://www.carina.hr/e\_carina/NCTS.aspx (Accessed on: August 3, 2014)
- Carinska uprava Republike Hrvatske, (2014), "Poslovna strategija Ministarstva financija, Carinske uprave za razdoblje 2014-2016" (Ministry of Finance Customs administration Business strategy 2014-2016), Available at: http://www.carina.hr/Dokumenti/Download.aspx?args=jIdlbWgGHiMkNr+kGT px9ZuwHfkMFYNj (Accessed on: July 22, 2014)
- 7. Chopra, S., Meindl, P. (2004). Supply Chain Management, 2nd ed., Pearson Prentice Hall.
- 8. Doyle, T., Janssens, F. (2011), "Information and communications technology in support of customs unions: a case study of European Union," in McLinden, G., et al., (eds.), Border Management Modernization, The International Bank for Reconstruction and Development / World Bank, Washington D.C., pp. 251-262.
- Elorza, J. C. (2012), "International Trade Single Window. Requirements for a successful implementation in Latin America", Public Policy and Productive Transformation Series Corporación Andina de Fomento.
- 10. Erceg, A., Orešković, B. (2010), "Utjecaj primjene carinskoga pojednostavljenoga postupka "Ovlašteni primatelj" na smanjenje logističkih troškova u proizvođačkoj tvrtki" (The impact of the application of customs simplified procedure "Authorized consignee" to reduce logistic costs in manufacturing company), in Leko Šimić, M., (ed.), Marketing i održivi razvoj, Ekonomski fakultet Osijek, pp. 181-196.
- 11. European Commission, (2012)," Electronic customs multi-annual strategic plan, yearly revision MASP Rev. 11.0", Available at: http://ec.europa.eu/taxation\_customs/resources/documents/customs/policy\_issues/ecustoms\_initiative/masp\_strategic\_plan\_en.pdf (Accessed on: July 15, 2014)
- 12. European Council, (2008), "Council Directive 2008/118/EC of 16 December 2008 concerning the general arrangements for excise duty and repealing Directive 92/12/EEC", O. J. L 9/12, Available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:009:0012:0030:EN:PDF (Accessed on: July 10, 2014)
- 13. Golenić, A. (2013), "Logistika važna komponenta suvremenog poslovanja" (Logistic important component of modern Business), Suvremena trgovina 4/2013, Available at: http://www.suvremena. hr/26007.aspx (Accessed on: July 10, 2014)
- 14. Gordhan, P. (2007), "Customs in the 21st Century", World Customs Journal, Vol. 1, No.1, pp. 49-54.
- 15. Grainger, A. (2007), "Supply chain security: adding to a complex operational and institutional environment," World Customs Journal, Vol. 1, No. 2, pp. 17-29.
- 16. Elmane-Helmane K., Ketners, K. (2012), "Integrated Customs Control Management in Latvia: Leassons Learned", Economics and Management, Vol. 17, No. 2, pp. 528-533.

- 17. European Community, (2001), "New customs transit systems for Europe", Available at: http://ec.europa.eu/taxation\_customs/resources/documents/annex\_i\_transit\_brochure\_en.pdf (Accessed on: August 1, 2014)
- 18. Hoekman, B. (2011), "Foreword", in McLinden, G., et al., (eds.), Border Management Modernization, The International Bank for Reconstruction and Development / World Bank, Washington D.C, pp. 3-4.
- 19. Horvat, N. (2011), "e-Carina" (e-Customs), Carinski vjesnik, Vol. 20, No. 8, pp. 31-45.
- 20. Libby, M. H. (2011), "Business Climate for Competitiveness in the Americas: Simplification of Procedures to Promote Competitiveness Single Windows and other instruments that improve a country's business climate", Inter-American Development Bank, Available at: http://publications.iadb.org/bitstream/handle/11319/5077/Business%20Climate%20for%20Competitiveness%20in%20the%20 Americas-.pdf?sequence=1 (Accessed on: July 20, 2014)
- 21. Stock, G. N, Greis, N. P., Kasarda, J. D. (1998), "Logistic, strategy and structure A conceptual framework", International Journal of Operations & Production Management, Vol. 18, No. 1, pp. 35-52.
- 22. Szelp, A. (2010), "Cargo Security Initiatives in the EU and the USA, their Impact on Business Operations and Mutual Recognition with Focus on AEO and C-TPAT", thesis in International Logistic Management defended on Wirtschaftsuniversität Wien.
- 23. Tomašević, Z. (2011), "Praktična primjena Novog kompjuteriziranog provoznog sustava u Republici Hrvatskoj" (Practical application of New Computerised Transit System in Croatia), Carinski vjesnik, Vol. 20, No. 8, pp. 5-10.
- 24. Tomašević, Z. (2014), "Elektronička carina sa zakonodavnog aspekta", (Legal aspects of e-Customs), Carinski vjesnik, Vol. 23, No. 2, pp. 15-23.
- 25. Tweedle, D. (2008), "Logistic, Security and Compliance: The Part to be Played by Authorised Economic Operators (AEOs) and Data Management," World Customs Journal, Vol. 2, No. 1, pp. 101-105.
- 26. Urcioli, L., Ekwall, D. (2009), "Supply Chain Security Programs Comparing business and authority certifications", in Hertz, S., (ed.), The 21st Annual Nofoma Conference, proceedings, Jönköping Sweden, pp. 837-852.
- 27. Vatuiu, T., Tarca, N., Udrica, M., Popeanga, V. N. (2010), "The use of the EMCS business web application for monitoring the movement of excise goods within the European Community", Annals of the University of Petroşani Economics, Vol. 10, No. 4, pp. 363-374.
- 28. Vogel, T., Schmidt, A., Lemm, A., Osterle, H. (2008), "Service and Document Based Interoperability for European eCustoms Solutions", Journal of Theoretical and Applied Electronic Commerce Research, Electronic Version, Vol. 3, No. 3, pp. 17-37.
- 29. Widdowson, D. (2007), "The changing role of customs: Evolution or revolution?", World Customs Journal, Vol. 1, No. 1, pp. 31-37.
- 30. Zhang, A. (2002), "Electronic technology and simplification of customs regulations and procedures in air cargo trade", Journal of Air Transportation, Vol. 7, No. 2, pp. 87 102.

#### (ENDNOTES)

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#### Utjecaj novih carinskih procedura i logističkih sigurnosnih standarda na konkurentnost poduzeća – slučaj hrvatskog poduzeća

#### Sažetak

Na današnjem globalnom tržištu poduzeća se svakodnevno susreću s konkurencijom na regionalnoj, nacionalnoj i međunarodnoj razini. Ona stoga koristite različite strategije i alate kako bi postala i/ili ostala konkurentna. Potencijalno područje za snižavanje troškova poduzeća je u upravljanju lancem nabave te logističkim i carinskim procedurama. Implementacija različitih logističkih standarda u upravljanju lancem nabave može donijeti uštedu za svakodnevne operacije poduzeća te samim time smanjiti ukupne troškove i povećati konkurentnost poduzeća.

Korištenje različitih carinskih procedura i logističkih standarda kako bi snizili svoje troškove i postali konkurentniji na tržištu, potrebno je i u hrvatskim poduzećima. Postupak upotrebe ovih alata nije jednokratan te zahtijeva neprekidne napore. Poduzeća stoga moraju biti spremna svakodnevno napredovati kako bi bila i ostala konkurentna. Upotrebom različitih modernih carinskih procedura mogu uštedjeti novac i vrijeme, i to ne samo kroz te procedure, nego i kroz bolje korištenje vremena svojih radnika, vlastitih vozila i druge opreme.

U radu se analiziraju različite carinske procedure i logistički standardi koji mogu pomoći poduzećima u uštedi vremena i novca te poboljšanju njihove konkurentnosti. Na primjeru hrvatskoga poduzeća koje koristi različite dostupne procedure i standarde prikazuju se prednosti koje donosi njihova upotreba. Sve te procedure i standardi, osim što donose uštede u poslovanju, omogućuju poduzeću da bude bolje, jeftinije i privlačnije kupcima.

Ključne riječi: carinske procedure, logistički standardi, upravljanje lancem nabave, uštede, konkurentnost