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LOGISTIC COSTS OF PRIVILEGED PROCEDURES IN THE REPUBLIC OF CROATIA

ABSTRACT

Logistic processes condition more and more the rationalization of time required for manipulation of goods (loading, unloading, storage). The customs representation costs that are the result of loss of time due to the customs procedures exclusively during the working hours of the customs office affect also the total logistic costs, and may be significantly reduced by applying the privileged procedures in import and export.

KEY WORDS

logistics, logistic operator, costs, privileged procedures, customs representation, Republic of Croatia

1. INTRODUCTION

Logistic operators in the process of globalization and introduction in the international flows of goods are becoming one of the major factors that combine the transport, economic and organizational functions. Their task is to offer a complete and most favourable transport service taking into account the optimal transport route, transportation means and goods manipulation form, with the aim of minimizing the costs of logistic services.

The tasks of customs representation in import and export of goods significantly influence also the final price of the logistic service. The implementation of the privileged procedures of customs representation is stipulated by the Customs Act [1] adopted on 01 January 2000 and by the Decree on Implementing the Customs Act [2] when a unique customs declaration (JCD) was introduced into the customs procedure, which was adapted to the same documents applied in the EU. Customs representation in privileged procedures is implemented in import and export of goods, and the users are thus provided with the possibility of competitiveness in the logistic tasks through:

- possibility of organizing reception and delivery of goods according to the needs of the market and according to one's own possibilities, regardless of the working hours of the customs office (there are no costs of customs inspection outside working hours);
- reduction of time caused by customs formalities (stipulated waiting for delivery is 30 min after having sent the information to the authorized customs house);
- maximal utilization of all the logistic capacities (transport, storage, manipulation);
- reduction of costs of documentation due to combining of several deliveries of the same kind.

During the customs procedure, based on the actual costs and by charging for their services, the logistic operator deals with the service user (the customer). Only maximal implementation of all the benefits brings about maximal profit at the lowest price, as well as the satisfaction of the logistic service users.

2. COSTS

In their business the logistic operators have constant costs that are independent of whether the customs procedure tasks are carried out in the regular or privileged procedure. Constant costs include:

- employees' salaries;
- expenses of professional improvement of the employees;

- logistic operator working premises;
- overheads (gas, electricity, heating, telephone);
- costs for computer equipment (computers, printers, etc.);
- computer programs (software).

The costs that occur during the customs procedure regardless of the implementation of a regular or privileged procedure, thus not affecting the change in the logistic costs in the privileged procedure are:

- costs for using the terminal;
- costs of veterinarian and sanitary inspection;
- costs of control weighing / counting, / collective packaging;
- certificate issue costs.

A significant part consists of costs that can be reduced and even eliminated by the implementation of privileged procedures, and they are:

- customs representation service;
- customs clearance costs outside the working hours of the customs officials.

The costs of sending the declaration by the Internet have not been taken into consideration since some logistic operators have constant access to the Internet, while others use it only from time to time and no such general costs can be expressed.

The costs of customs representation services are not identical for every logistic operator since the service price is formed according to several criteria (regarding quantity, based on many years of contracts, etc.) and therefore, these costs are not taken into consideration in the calculation of the logistic costs. With the implementation of the privileged procedures the customs representation tasks at the exporter's and importer's are usually carried out by the privileged receivers and sender themselves where this service is not charged. Some logistic operators submit only the collective declaration and only part of the service is charged, which additionally reduces the logistic costs.

Having in mind that the logistic costs are the same in the logistic companies that are involved in the tasks of customs representation regardless of the type of the customs procedure – regular or privileged just by being stipulated through Laws, this work will analyze only the costs of completing the customs documents in customs representation. These costs include the costs of necessary forms (O), administration (UP) and customs duties (CP) and their influence on the overall logistic costs.

2.1. FORMS

In calculating the costs of forms in customs representation, the purchase price of a set of customs declarations (JCD) for regular and privileged procedure, of CMR and the accompanying forms, with V. A. T. not included, has been taken as the value. In the procedure of regular import and export, only the form JCD represents an expense. In the procedure of privileged import the expenses include the registers of the accounting records and forms for the collective declaration application. The expenses of the privileged export procedure forms include:

- the price of the form JCD for simplified export;
- stamps for letters up to 20 grams;
- envelope;
- additional evidence;
- price of the form JCD for submitting the collective declaration.

2.2. ADMINISTRATION FEES

Payments for administration fees in the customs procedure are defined by the Act on Administration Fees [3]¹ which lists the tariffs of administration fees in the customs procedure. In the procedure of customs representation in import, the calculation takes into account only the costs of submitting the import customs declaration, excluding the costs of additional solutions and certificates since these are constant not depending on the type of the procedure.

The procedure of regular import stipulates the amount of administration fees regardless of the number of items (goods) which are customs cleared in JCD. When submitting the collective declaration in the privileged import procedure, the costs of administration fees do not depend on the number of deliveries that are included in the respective declaration. Thus, the costs of administration fees in the privileged import procedure are significantly reduced with the increase in the number of deliveries of the same type over a certain period of time.

2.3. CUSTOMS FEES

Article 7 of the Customs Tariff Act [4] stipulates that the submission of customs declarations is charged by a customs fee for every import and export declaration and for every individual consignment in the collective declaration. The costs of customs fees do not affect the logistic costs of privileged procedures since they are constant and independent of the regular and privileged procedure.

3. LOGISTIC COSTS IN EXPORT

3.1. Costs of regular export

 $y_r = a x$

In the procedure of regular export the logistic costs of forms for one consignment increase linearly with the increase in the number of export customs declarations per model (1):

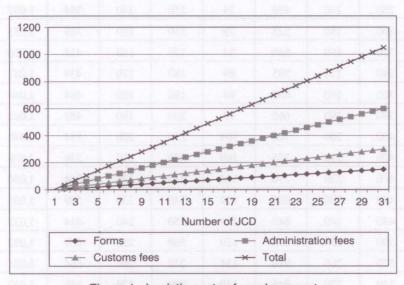
Table 1 - Logistic co	sts in export
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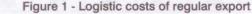
		Regular	r Export		1.2	Privilege	ed export		28	Costs	
Number	23GM	y _r =	= ax	10		$y_p = a$	ix + b	0313			
of JCD weekly	0	UP	СР	Σ	0	UP	CP	Σ	5	INDEX	
0.725	1	2	3	4	5	6	7	8	5/1	6/2	8/4
1	5	20	10	35	9	20	10	39	1,800	1,000	1,114
2	10	40	20	70	14	30	20	64	1,400	0,750	0,914
3	15	60	30	105	19	40	30	89	1,267	0,667	0,848
4	20	80	40	140	24	50	40	114	1,200	0,625	0,814
5	25	100	50	175	29	60	50	139	1,160	0,600	0,794
6	30	120	60	210	34	70	60	164	1,133	0,583	0,781
7	35	140	70	245	39	80	70	189	1,114	0,571	0,771
8	40	160	80	280	44	90	80	214	1,100	0,563	0,764
9	45	180	90	315	49	100	90	239	1,089	0,556	0,759
10	50	200	100	350	54	110	100	264	1,080	0,550	0,754
11	55	220	110	385	59	120	110	289	1,073	0,545	0,751
12	60	240	120	420	64	130	120	314	1,067	0,542	0,748
13	65	260	130	455	69	140	130	339	1,062	0,538	0,745
14	70	280	140	490	74	150	140	364	1,057	0,536	0,743
15	75	300	150	525	79	160	150	389	1,053	0,533	0,741
16	80	320	160	560	84	170	160	414	1,050	0,531	0,739
17	85	340	170	595	89	180	170	439	1,047	0,529	0,738
18	90	360	180	630	94	190	180	464	1,044	0,528	0,737
19	95	380	190	665	99	200	190	489	1,042	0,526	0,735
20	100	400	200	700	104	210	200	514	1,040	0,525	0,734
21	105	420	210	735	109	220	210	539	1,038	0,524	0,733
22	110	440	220	770	114	230	220	564	1,036	0,523	0,732
23	115	460	230	805	119	240	230	589	1,035	0,522	0,732
24	120	480	240	840	124	250	240	614	1,033	0,521	0,731
25	125	500	250	875	129	260	250	639	1,032	0,520	0,730
26	130	520	260	910	134	270	260	664	1,031	0,519	0,730
27	135	540	270	945	139	280	270	689	1,030	0,519	0,729
28	140	560	280	980	144	290	280	714	1,029	0,518	0,729
29	145	580	290	1015	149	300	290	739	1,028	0,517	0,728
30	150	600	300	1050	154	310	300	764	1,027	0,517	0,728
31	155	620	310	1085	159	320	310	789	1,026	0,516	0,723
32	160	640	320	1120	164	330	320	814	1,025	0,516	0,727
33	165	660	330	1155	169	340	330	839	1,024	0,515	0,726
34	170	680	340	1190	174	350	340	864	1,024	0,515	0,726
35	175	700	350	1225	179	360	350	889	1,023	0,514	0,726
36	180	720	360	1260	184	370	360	914	1,022	0,514	0,725
37	185	740	370	1295	189	380	370	939	1,022	0,514	0,725

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Number of JCD weekly		Regular	Export			Privilege	ed export	Costs			
		y _r =	= ax		Pelalen	$y_p = a$	x + b				
	0	UP	CP	Σ	0	UP	СР	Σ		INDEX	reduced
	1	2	3	4	5	6	7	8	5/1	6/2	8/4
38	190	760	380	1330	194	390	380	964	1,021	0,513	0,725
39	195	780	390	1365	199	400	390	989	1,021	0,513	0,725
40	200	800	400	1400	204	410	400	1014	1,020	0,513	0,724
41	205	820	410	1435	209	420	410	1039	1,020	0,512	0,724
42	210	840	420	1470	214	430	420	1064	1,019	0,512	0,724
43	215	860	430	1505	219	440	430	1089	1,019	0,512	0,724
44	220	880	440	1540	224	450	440	1114	1,018	0,511	0,723
45	225	900	450	1575	229	460	450	1139	1,018	0,511	0,723
46	230	920	460	1610	234	470	460	1164	1,017	0,511	0,723
47	235	940	470	1645	239	480	470	1189	1,017	0,511	0,723
48	240	960	480	1680	244	490	480	1214	1,017	0,510	0,723
49	245	980	490	1715	249	500	490	1239	1,016	0,510	0,722
50	250	1000	500	1750	254	510	500	1264	1,016	0,510	0,722

Source: Author's research





Source: Author's research

In the costs of forms (O) the value of variable a consists of price JCD, CMR etc. In administration costs (UP) the value of variable a=20, whereas in costs of customs duty (CP) the constant value a=10.

3.2. Costs of privileged export

Customs representation in the privileged export is performed by the dispatch of goods from their own premises with putting their own customs designations where the costs of forms include the costs of:

- additional evidences,

- export customs declarations,
- collective customs declarations.

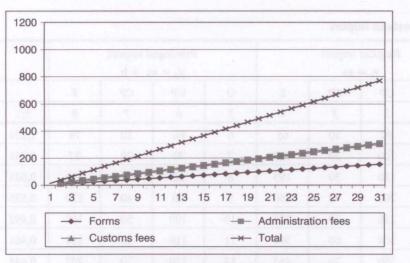
Additional evidences are stipulated by the consent of CURH (information, bookkeeping records, controllers), and for the return of the documents from the border it is necessary to insure adequate envelopes and stamps at the moment of dispatch.

In the procedure of privileged export the logistic costs increase linearly for the costs of additional evidences and collective declarations per model (2):

$$y_p = a x + b \tag{2}$$

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Source: Author's research

In the costs of forms (O) variable *b* represents the amount of costs of additional evidences and collective declaration forms.

In the administration fees costs (UP) the value of variable a=10 for ever consignment, and value b=10 only for the collective declaration [3].

The customs fee costs (CP) do not depend on the type of procedure and rise linearly in regular and privileged procedure per model (1).

The comparison of the logistic costs of regular and privileged export (Table 1) shows that with the increase in the number of consignments in a certain period of time the costs of administration fees fall substantially whereas the customs fees remain the same and do not influence the reduction of overall costs.

The trend in logistic costs in export can be shown by equation (3):

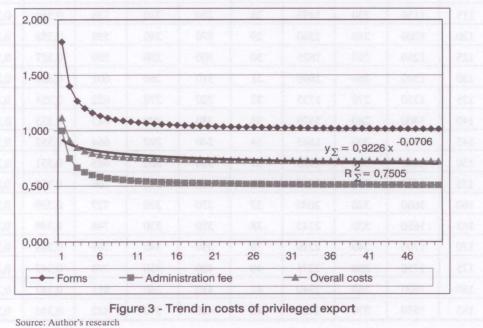
 $y_{\Sigma} = ax^{-b}$

(3)

It can be seen that the trend in overall logistic costs in export behaves according to the exponential model which, although not in ideal values ($R_{\Sigma}^2=0.7505$) yields acceptable values which should stimulate the users to greater usage, especially in case of a large number of consignments.

4. LOGISTIC COSTS IN IMPORT

In the procedure of regular import, the logistic costs of customs representation include the costs of form JCD, administration fees and customs duties. With the increase in the number of consignments over a certain period, the logistic costs increase linearly per model (1).



		Regular	-			Privilege	1000	COSTS			
Number of JCD weekly		y _r =	= ax			$y_p = a$	A 1002	00010			
	0	UP	СР	Σ	0	UP	СР	Σ		INDEX	
	1	2	3	4	5	6	7	8	5/1	6/2	8/4
1	5	50	10	65	6	60	10	76	1,169	1,200	1,200
2	10	100	20	130	7	70	20	97	0,746	0,700	0,700
3	15	150	30	195	8	80	30	118	0,605	0,533	0,533
4	20	200	40	260	9	90	40	139	0,535	0,450	0,450
5	25	250	50	325	10	100	50	160	0,492	0,400	0,400
6	30	300	60	390	11	110	60	181	0,464	0,367	0,367
7	35	350	70	455	12	120	70	202	0,444	0,343	0,343
8	40	400	80	520	13	130	80	223	0,429	0,325	0,325
9	45	450	90	585	14	140	90	244	0,417	0,311	0,311
10	50	500	100	650	15	150	100	265	0,408	0,300	0,300
11	55	550	110	715	16	160	110	286	0,400	0,291	0,291
12	60	600	120	780	17	170	120	307	0,394	0,283	0,283
13	65	650	130	845	18	180	130	328	0,388	0,277	0,277
14	70	700	140	910	19 -	190	140	349	0,384	0,271	0,271
15	75	750	150	975	20	200	150	370	0,379	0,267	0,267
16	80	800	160	1040	21	210	160	391	0,376	0,263	0,263
17	85	850	170	1105	22	220	170	412	0,373	0,259	0,259
18	90	900	180	1170	23	230	180	433	0,370	0,256	0,256
19	95	950	190	1235	24	240	190	454	0,368	0,253	0,253
20	100	1000	200	1300	25	250	200	475	0,365	0,250	0,250
21	105	1050	210	1365	26	260	210	496	0,363	0,248	0,248
22	110	1100	220	1430	27	270	220	517	0,362	0,245	0,245
23	115	1150	230	1495	28	280	230	538	0,360	0,243	0,243
24	120	1200	240	1560	29	290	240	559	0,358	0,242	0,242
25	125	1250	250	1625	30	300	250	580	0,357	0,240	0,240
26	130	1300	260	1690	31	310	260	601	0,356	0,238	0,238
27	135	1350	270	1755	32	320	270	622	0,354	0,237	0,237
28	140	1400	280	1820	33	330	280	643	0,353	0,236	0,236
29	145	1450	290	1885	34	340	290	664	0,352	0,234	0,234
30	150	1500	300	1950	35	350	300	685	0,351	0,233	0,233
31	155	1550	310	2015	36	360	310	706	0,350	0,232	0,232
32	160	1600	320	2080	37	370	320	727	0,350	0,231	0,231
33	165	1650	330	2145	38	380	330	748	0,349	0,230	0,230
34	170	1700	340	2210	39	390	340	769	0,348	0,229	0,229
35	175	1750	350	2275	40	400	350	790	0,347	0,229	0,229
36	180	1800	360	2340	41	410	360	811	0,347	0,228	0,228
37	185	1850	370	2405	42	420	370	832	0,346	0,227	0,227

Table 2 - Logistic costs in import

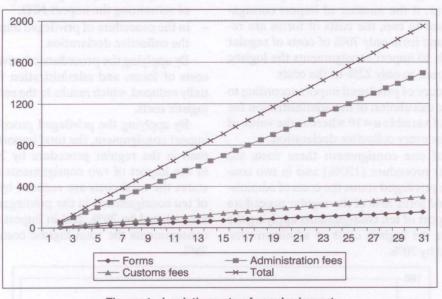
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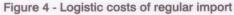
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Number of JCD weekly		-	import = ax			-	d import x + b	2009	COSTS		
	0	UP	СР	Σ	0	UP	CP	Σ	- 0.01	INDEX	
	1	2	3	4	5	6	7	8	5/1	6/2	8/4
38	190	1900	380	2470	43	430	380	853	0,345	0,226	0,226
39	195	1950	390	2535	44	440	390	874	0,345	0,226	0,226
40	200	2000	400	2600	45	450	400	895	0,344	0,225	0,225
41	205	2050	410	2665	46	460	410	916	0,344	0,224	0,224
42	210	2100	420	2730	47	470	420	937	0,343	0,224	0,224
43	215	2150	430	2795	48	480	430	958	0,343	0,223	0,223
44	220	2200	440	2860	49	490	440	979	0,342	0,223	0,223
45	225	2250	450	2925	50	500	450	1000	0,342	0,222	0,222
46	230	2300	460	2990	51	510	460	1021	0,341	0,222	0,222
47	235	2350	470	3055	52	520	470	1042	0,341	0,221	0,221
48	240	2400	480	3120	53	530	480	1063	0,341	0,221	0,221
49	245	2450	490	3185	54	540	490	1084	0,340	0,220	0,220
50	250	2500	500	3250	55	550	500	1105	0,340	0,220	0,220

Source: Author's research



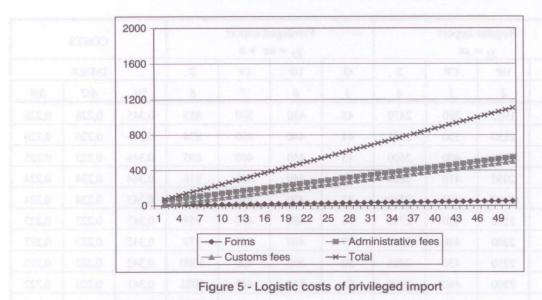


Source: Author's research

The procedures of privileged import are carried out without submission of imported goods to the interior customs office, by means of keeping the accountancy records and with the requirement of submitting the collective declarations within a certain period of time. The costs include only the costs of forms since the costs of sanitary, veterinarian, and other inspections are obligatory and do not depend on the import procedure.

Keeping of additional evidences is stipulated by the approval of CURH, and the costs of keeping the evidence about the privileged procedure in import are substantially smaller than in export, whereas the collective customs declaration is submitted for all consignments in the previous period. The costs of administration fees are constant for one individual or collective import JCD, regardless of the number of import consignments.

The costs of privileged import are substantially lower than the logistic costs of regular procedures of customs representation. The reduction of costs is reflected in fewer forms and reduced costs of adminis-



Source: Author's research

tration fees which results in the reduction of total logistic costs.

By increasing the number of import consignments, the costs of forms are reduced. For a single consignment these are higher than the regular procedure (120%). However, if the number of import consignments is increased to two, the costs of forms are reduced by 50%, and form only 70% of costs of regular import, and with 50 import consignments the logistic costs would amount to only 22% of the costs.

In the procedure of privileged import according to model (2), in the calculation of the administration fee costs the value of variable a=10 whereas the value of variable b=50 for every collective declaration.

By import of one consignment these costs are higher in regular procedure (120%) and in two consignments in the privileged status the costs of administration fees would form 70% of the regular procedure costs, and in import of ten consignments applying the privileged status the logistic costs of administration fees are reduced by 70%.

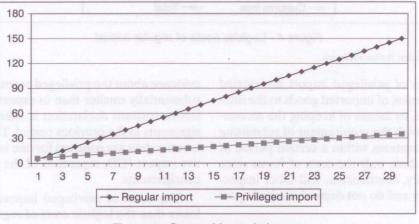
Source: Author's research

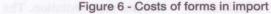
The costs of customs fees rise according to the linear model (1) and they do not influence the reduction of the logistic costs since these are charged for every import consignments:

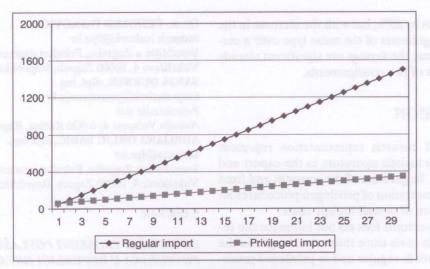
- in the procedure of regular import at the moment of submitting the import JCD,
- in the procedure of privileged import in submitting the collective declaration.

By applying the procedure of privileged import the costs of forms and administration fees are substantially reduced, which results in the reduction of overall logistic costs.

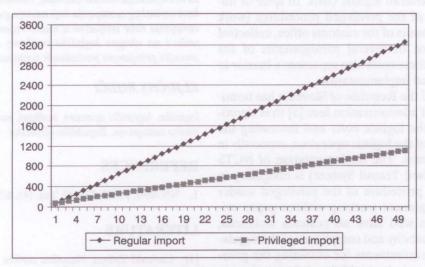
By applying the privileged procedure for a single import consignment, the total import costs are higher than in the regular procedure by 20%, but already in the import of two consignments in the privileged status the total costs are reduced by 30%. In import of ten consignments in the privileged status the costs are reduced by 70%, and in import of more than 40 consignments the total logistic costs are reduced by 78%.





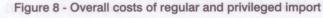






Source: Author's research

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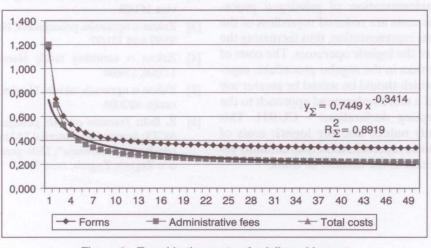


Figure 9 - Trend in the costs of privileged import

Source: Author's research

The implementation of the procedure of the privileged import is not cost-efficient in import of a single consignment due to the increased costs of forms and administration fees which influences the increase of

total logistic costs by 20%, but with the increase in the number of consignments of the same type over a certain period of time, the savings are significant already in case of import of two consignments.

5. CONCLUSION

The costs of customs representation represent constant costs to logistic operators in the export and import of goods. Regardless of the constant and fixed costs, the implementation of privileged procedures affects the reduction of overall logistic costs.

The costs of customs fees do not influence the reduction of logistic costs since these are charged in the same amount both in regular and in privileged procedures.

There is major influence of the costs of administration fees on the overall logistic costs. In spite of numerous benefits of the privileged procedures (work outside working hours of the customs office, collective customs clearance of several consignments of the same type, etc.), these costs also represent a barrier to a more widespread implementation.

By joining EU the Republic of Slovenia has terminated charging of administration fees [5] thus significantly reducing the logistic costs and increasing the competitiveness of the logistic operators, especially in the privileged status. The implementation of NCTS (New Computerised Transit System) is obligatory in carrying out the procedure of the privileged sender and allows consignment tracking without paper evidence. The users who have no customs violations, guarantee the reliability and compliance to the regulations, fulfil the requirements for obtaining the privilege – to submit periodical additional declarations in paper or electronic form.

With the implementation of privileged procedures, the logistic costs are reduced regardless of the services of customs representation, thus increasing the competitiveness of the logistic operators. The costs of forms are higher than in the regular procedure, especially in export, which should be solved by greater use of computers and a more widespread approach to the system for accepting declarations - CURH. This would significantly reduce also the logistic costs of forms in the customs representation thus certainly resulting in an increase in the number of users. Dr. sc. ČEDOMIR IVAKOVIĆ cedomir.ivakovic@fpz.hr Sveučilište u Zagrebu, Fakultet prometnih znanosti Vukelićeva 4, 10000 Zagreb, Republika Hrvatska SANJA DURBEK, dipl. ing. sanja.durbek@petrokemija.hr Petrokemija d.d. Avenija Vukovar 4, 44320 Kutina, Republika Hrvatska ADRIJANA ORLIĆ BABIĆ, dipl. ing. adrijana@fpz.hr Sveučilište u Zagrebu, Fakultet prometnih znanosti Vukelićeva 4, 10000 Zagreb, Republika Hrvatska

SAŽETAK

LOGISTIČKI TROŠKOVI POVLAŠTENIH POSTUPAKA U REPUBLICI HRVATSKOJ

Logistički procesi sve više uvjetuju racionalizaciju vremena za manipulaciju robom (utovara, istovara, skladištenja). Troškovi carinskog zastupanja koji nastaju gubitkom vremena radi carinjenja robe isključivo u radno vrijeme carinske ispostave utiču i na ukupne logističke troškove, a mogu se značajno smanjiti primjenom povlaštenih postupaka u uvozu i izvozu.

KLJUČNE RIJEČI

logistika, logistički operater, troškovi, povlašteni postupci, carinsko zastupanje, Republika Hrvatska

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consignment due to the increased costs of forms and identification fees which influences the increase of