

# IT Systems in Customs Service of Transport Companies – Case Study

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This article presents the process of customs clearance of goods using the SAD EC WIN IT system. It presents the basic procedures and legal requirements in the customs service of goods, and the need for electronic data flow in these procedures. The application of the IT system in the basic procedure with the opening of the TIR procedure was also presented.

**Keywords:** IT systems, customs service.

## 1. INTRODUCTION

In reality of increasing the internationalization of transport companies, the operations and customs services are important processes carried out by these enterprises. Customs clearance covers all goods whose country of destination or origin is different from a country belonging to the European Union, and the flow of goods in international trade is so developed and widespread that it forces entrepreneurs to use customs offices by means of clearance outside the country's borders, in accordance with all customs procedures regulated by law.

Informatisation of customs clearance processes enabled the electronic flow of customs documentation, which consequently led to the need to use appropriate IT tools on the part of the entrepreneur or customs agent. The purpose of this article is to show the meaning of the IT system in the process of customs services.

## 2. BASIC PROCEDURES AND LEGAL REQUIREMENTS FOR CUSTOMS SERVICE OF GOODS

All goods that go to the EU, or are intended for export to a third country, must be qualified for customs clearance. It is done on the basis of the necessary documentation belonging to a given commodity, which consists of the following: a commercial invoice, specification, certificates proving the origin of the product and its physical nature (composition, size, commodity purpose).

Customs clearance is performed on the designated territory by a body authorized to do so. It is important from the perspective of the customs clearance process to distinguish the category of transport services, because their type implies the need for customs clearance for a given commodity (Table 1).

Table 1. Categories of transport services.

National transport	Intra-Community transport	International transport
Performed exclusively on the territory of a given country, eg transport of goods on the territory of Poland	Performed between different EU member states	Transport starting in a country belonging to the European Union and ending in the territory of a third country and vice versa

Source: based on H. Kończal, *Pomocnik Podatnika VAT – Transport zagraniczny w pigułce*, Wydawnictwo Podatkowe GOFIN, Gorzów Wlkp. 2016, pp. 1,2

The countries included in the EU Community have abolished all customs duties by creating customs territory, which also includes territorial sea waters and inland waters of the EU member states, as well as the airspace of each country. They constitute a unified commercial area, allowing free movement of community commodities.

Performing transport with the participation of third countries, which means all states that are not a part of the European Union, for each carrier is connected with customs clearance. It is implemented for the following procedures:

- import,
- export,
- customs warehouse,
- inward and outward processing.

The origin of the goods is of particular importance in the performance of international transport outside the territory of the community at customs clearance. The origin of the commodity is considered to be the country from which it was brought into the area. All goods purchased in a non-EU country and their country of destination belong to the community are imported.

When the border of the country of the community is crossed, the goods are in the transit status, this means that in order to become an authorized commodity, they freely move around the countries of the community, all customs duties which burden on it should be paid. Such duties are customs and tax. These receivables and admission to trading from the legal side are based on the following documents: a commercial invoice and a SAD -T1 transit document made out in the customs system based on an invoice. The T1 document contains: the consignor, the consignee, the quantity of goods, the name of the goods, the customs code of the Combined Nomenclature, and the statistical value.

Such a procedure is opened by customs agencies that receive information about the consignee's arrival. The T1 document has an expiry date, which must be strictly observed, it is 14 days. The consignee may allow the imported goods to be admitted to trading by closing the T1 document, i.e. by paying customs duties on the goods, or open the TIR carnet, enter the goods to the temporary storage warehouse, which is the customs warehouse.

The opposite is true if we deal with exports. All goods of the EU origin can be moved outside the

community, being in the export status. Goods in the export status are under the cover of the export declaration - EX. The expiration date is 90 days for exporting the goods outside the community. EX is a document stating and declaring the export outside the community. The preparation of the export declaration belongs to the customs agent who declares the export of the goods on the basis of a commercial invoice and authorization from the exporter. EX contains: consignor, consignee, quantity of goods, name of goods, customs code of combined nomenclature, statistical value.

The customs procedure which is the customs warehouse is the customs territory, defined by the permit issued by the President of the Central Customs Office and it is supervised and controlled by persons specified in the permit. The Customs Code divided the customs warehouse into two groups: the customs warehouse and the private customs warehouse. Public, in other words, in which your goods can be stored by every national person, while private is only intended for storage of goods by the warehouse keeper only for the needs of his company. The Customs Code, as part of such a division, introduced three types of customs warehouses:

- type A - public warehouse, in which the operator is responsible for ensuring customs control over the submitted goods, so that it is not removed from customs supervision. He is also obliged to comply with the obligations arising from the storage of goods placed under the customs warehousing procedure,
- type B is also a public warehouse, where the operator is obliged to comply with all the conditions set out in the permit and the regulations for the operation of the warehouse. Everyone using the public warehouse is fully responsible for ensuring customs control of the goods placed in the warehouse, as well as compliance with obligations arising from the goods under the customs warehousing procedure,
- type C is a private customs warehouse, all duties towards goods stored in a bonded warehouse are borne by the fully managing warehouse.

The customs warehousing procedure enables companies to purchase goods on the foreign market, and to store goods without time limits: non-domestic goods without payment of customs duties that they incur on it, and domestic goods for which appropriate export customs formalities have

been carried out. The customs declaration of the goods being placed under the customs procedure which is the customs warehouse is made on the SAD document. In order for the goods to be placed under the customs warehousing procedure, a security must be lodged that cannot be lodged later than upon the arrival of the goods.

The inward processing procedure consists in subjecting the goods to any treatment, repair, processing and use in the Community customs territory. These processes may be subject to both non-domestic goods and those which by admission to trading have gained the status of domestic goods.

The outward processing procedure is the temporary export of goods out of the customs territory of the Community for the purpose of refining, repairing or processing. This is the opposite situation for inward processing. The use of the outward processing procedure is governed by the export law out of the customs territory. For exported goods, export duties are applied temporarily if they are established. Completion of this customs procedure takes place with the introduction of a compensating product into the area of the community and through the declaration of customs admission to trading.

There cannot be two customs procedures at the same time, because if the goods are located e.g. in the export status, they cannot be in the import status at the same time. When opening the procedure, the goods are presented to customs authorities and subject to their full control.

Customs services and customs declarations are regulated by customs law. Customs law regulates: import of goods into the customs territory of the Community, export of goods from the customs territory of the Community, rules for dealing with goods that are covered by the Polish Agricultural Policy, ways to provide statistical data on intra-Community trade and trade with the Member States. The Customs Policy of Poland and the European Union is very much dependent on international regulations. Poland, as a member of the European Union, also joined the World Trade Organization, and thus committed to compliance with the following agreements: on agriculture, on the application of sanitary and phytosanitary measures, on textiles and clothing, on investment and trade-related measures, on technical barriers to trade in goods in trade, in customs tariff law, on pre-shipment investment, on rules of origin, on import licensing, on plant protection products, on trade in services, mechanism of customs policy

review. All these agreements define the methods and principles for determining the customs value of imported goods.

Customs services are fully provided at the customs agency. A customs agency is an organization that represents an entity before customs authorities and is therefore entitled to carry out activities that are provided for in customs legislation before the customs authorities. It offers assistance during customs clearance before the Customs Office and the border. It is an economic entity that can be a natural or legal person or an organizational unit without legal personality.

At customs clearance, the customs agency is obliged to check the compliance of the documents so that the goods are protected against customs clearance on the basis of falsified documents. He must fully comply with the customs law, follow professional ethics and prepare customs declarations on the basis of documents.

### 3. ELECTRONIC FLOW OF INFORMATION IN CUSTOMS CLEARANCE

With the development of information technology, the number of modern solutions improving and automating customer service and streamlining the work of offices is growing in public administration units. Customs Service is one of the institutions that introduces a large number of innovative information systems. On 5 June 2012, the Minister of Finance, by order No. 23, introduced the obligation to keep registers by customs administration units for the register of goods that were given a customs purpose used in the course of exercising control. The ordinance specifies templates of documents and reports that must be prepared and provided for reporting purposes. At the beginning of May 2016, new legal regulations included in the EU Customs Code entered into force, one of the objectives of which was to introduce full computerization of business processes for entities that perform trade abroad and for customs authorities.

The changes that are taking place in the Member States and the EU administration in the field of customs systems are to ensure their full computerization by the end of 2020. Communication between customs authorities and enterprises will take place only electronically.

Currently, thanks to the electronic processing of customs declarations, entrepreneurs are already able to submit declarations and most

accompanying documents, without the need to visit the customs office. The Customs Service has so far implemented the following electronic services:

- registration of business entities trading in the EU,
- giving entities and maintaining a unique EORI identification number (Community System of Registration and Identification of Business Entities),
- providing data for operational customs systems on each entity,
- handling the import declaration in the simplified procedure,
- handling the export declaration in the simplified procedure,
- handling the export declaration,
- delivery in the XML format of the current customs tariff for entrepreneurs,
- information on the current customs tariff ([isztar.mf.gov.pl](http://isztar.mf.gov.pl)),
- handling the ADT document - moving excise goods under the suspended excise duty procedure.

The Customs Service is working on increasing the scope of existing computerization of customs services. Entrepreneurs have access to electronic services through the Electronic Services Platform of the Customs Service (PUEC), prepared as part of the e-customs project.

The electronic flow of information between enterprises and the customs office beyond many benefits forced the former to "arm itself" with appropriate IT tools supporting the information flow process. One of the programs of this type is SAD EC Win, intended for filling documents related to trade in goods with countries that do not belong to the European Union.

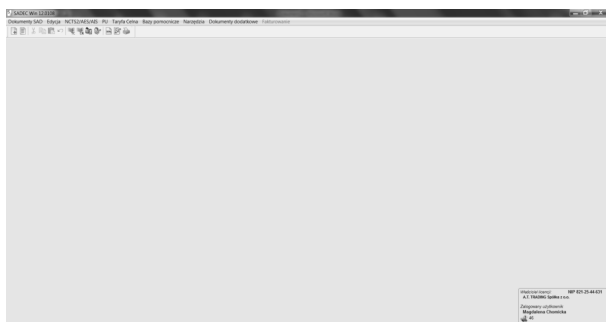


Fig. 1. The SADEC Win program start window.  
Own source.

In addition to documents presented to the customs administration (including in the form of

electronic XML applications), it is possible in this program to issue some accompanying documents related to trade with foreign countries. Already in the basic version of the SAD EC Win, the program contains:

- automatic creation based on commercial invoices and edition of SAD customs declarations,
- support for electronic calls SAD XML, NCTS2, AES XML,
- register of messages NCTS2 / ICS / Celina / AIS / AES,
- support for DS XML electronic applications,
- automatic communication with Celina / PUEC / BCP systems,
- a very extensive TARIC customs tariff, updated on a regular basis, the tariff outside the nomenclature part also contains information on customs and tax rates, export and import restrictions,
- the function of quickly calculating customs and tax duties for individual items
- the large functionality makes this program the basic tool for everyday work in the customs office.

#### 4. ANALYSIS OF CUSTOMS CLEARANCE PERFORMED IN A SIMPLIFIED PROCEDURE

The clearance process in the simplified procedure begins with the collection of the necessary documentation which is a commercial invoice containing: all data on the goods, the value of the goods, the invoice identification number, the quantity of goods for each item, customs code in accordance with the nomenclature merged, net and gross weight.

Below one can observe an example of briefing in a simplified procedure made by A.T. Trading for the exporter STADLER and opening the TIR procedure to the carrier TAPOL, which will deal with the transport of goods to a third country.

On the basis of two invoices, two export declarations "EX" were opened with different numbers, which contain the MRN identification number, the number of loading places, the weight of the goods, the country of dispatch and the country of destination, the consignor and consignee, and all data on the goods.

The customs agent checks the compatibility of the above documents. An CMR consignment note is created based on the invoice and the export

declaration. It is the proof of the conclusion of the contract for the carriage of cargo between the carrier and the supplier of the goods at the time of delivery of the first copy of the letter signed by the driver.

One set of consignment notes consists of four copies. They are intended for: Consignor (red), Consignee (blue), Carrier (green), Control (black).

At the presented briefing, the country of dispatch is Poland and the country of destination Belarus. The information about the unloading address and the address of the customs office of destination has been sent to the customer from STADLER.

The TAPOL company being the carrier for the STADLER company decided to open the TIR carnet for check-in, because the value on commercial invoices, which is significant and included in customs duties, did not exceed EUR 100,000. The TIR carnet guarantees the securing of customs duties resulting from the transported goods to EUR 100,000, if this amount is exceeded, the carrier is forced to open a declaration at the border securing customs duties.

Preparation of a customs declaration in a simplified procedure at A.T. Trading takes place using the SAD EC-Win program. It is a system that allows the company to prepare a briefing to open a TIR carnet, on the Poland - Belarus route for the STADLER exporter. The system is done in stages. The messages are a determinant for the status of "exemption", this status authorizes the customs agent to make final formalities in a simplified procedure, such as customs seals, and fill in the sheets of the TIR carnet.

The first step in submitting the application in the simplified procedure for the STADLER exporter in the SAD EC Win program is to open the task window. The description of the product has been titled "notification" so that it can be easily located. Type of documents "F" means transit, then in the notification field TIR marked, corresponding to this type of notification. The type of currency in which the commercial invoice is made is also indispensable (Fig. 2).

The second step is entering the consignor and consignee in the "commercial invoices" tab. The consignor in this application is STADLER. The exhibitor's field is dedicated to supplementing the necessary data, such as the name of the exporter, street, postal code, city and country, and the most important information for the Polish exporter is the EORI number, which must also appear in the application. The consignee "CJSC STADLER

MINSK" has been entered in the "Consignee" tab. In this window, enter the country of dispatch - Poland, and the country of destination – Belarus.

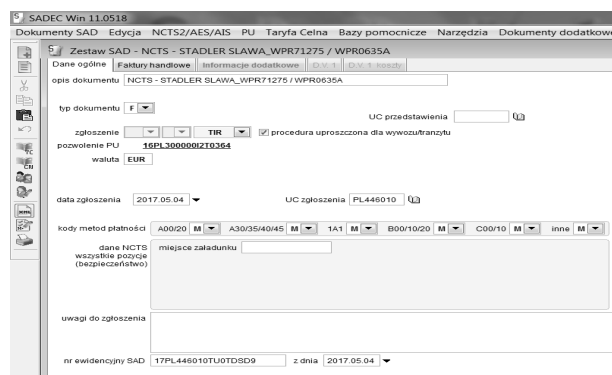


Fig. 2. The SADEC Win program in the first stage of preparing the customs declaration.

Own source.

The third step is also performed in the "commercial invoices" tab. In the "information documents" window, the previous two export declarations with two different MRN numbers were entered as a document.



Fig. 3. Third step of registration: entering two previous documents, such as export declarations

Own source.

The "commercial invoices" tab also includes a "goods description" subheading, a full description of the goods on the basis of commercial invoices (air channels included, returnable packaging), the type of packaging and the number of loading places (package type: PK; loading places: 4), gross weight was introduced.

The next step is introducing the TIR carnet ticket number in the "additional information" tab (XZ80362135), the following code is also marked: Y024 and Y025, which informs about the double use of the product (it does not endanger the human life and cannot be used for purposes other than those specified by the manufacturer). The codes for the clearance permit (3PL20) and the code informing about the AEO certificate (2UP2) were also selected.

Fig. 4. Entering codes in the "additional information" tab  
Own source.

After completing the necessary data for the notification in the simplified procedure, selecting from the task bar "Create SAD", a SAD document prepared for the NCTS notification in the simplified procedure appeared. In the task window in box 18, 21 the registration numbers of the means of transport as well as in box 19, 20 are entered in

which the means of transport is registered. In box 30, the license number belonging to the "approved location" of the item presentation has been selected. Field 50 is intended for carrier data (TAPOL). Box 53 is the code of the customs office of destination (PL301040 - Koroszczyn). In the bottom left corner there is information entered by the representative for the simplified procedure (name and surname of the applicant, the number of seals applied, the number of customs seals, and the date of closing the TIR procedure). The document prepared in this way is ready to be sent (Fig. 5).

The NCTS application prepared in the SADEC Win program in the simplified procedure has been sent to the customs system. The final stage is waiting for messages. Messages are a determinant for the imposition of customs seals by the consignor.

Fig. 5. SAD document  
Own source.

The first message is IE029. At this communication, the MRN application number is located, which has been printed and pinned to the vouchers of the TIR carnet. It informs about the notification, contains all the information that has been entered into the system while preparing the NCTS notification in a simplified procedure. +

The last message at this check-in is IE525 giving the "consent to cross the border" this message is information that the goods are not subject to revision by a customs officer, and authorizes the applicant to impose customs seals and to fill the vouchers of the TIR carnet. It is sent to every export declaration.

Each export declaration displaying a different code of the office of destination than the one to which the applicant's NCTS notification has been, an IE507 message is sent shortly after receiving the IE029 message to the NCTS notification, the system sends IE525 after verification.

well as examples of transport processes in A.T. Trading have shown that IT systems are not just an additional element to improve work. Currently, it would be impossible to provide customs services without these systems.

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typ	status	data kom.	godzina	czas PWK12	numer własny	numer MRN	opis dokumentu	data ewidencji
IE507	Odrzucony	2017.05.04	15:35	2017.05.04 g 15:38	17IE507AT03113	17PL446010E0088063		
IE507	Zgoda p granicy	2017.05.04	15:41	2017.05.04 g 15:42	17IE507AT03116	17PL446010E0088063		
IE525		2017.05.05	09:05		17IE507AT03116	17PL446010E0088063		

Fig. 6. Message IE 507 to the export declaration number MRN 17PL446010E0088063 and the IE525 message

The last steps at the clearance for the exporter STADLER in the simplified procedure, made by the customs office A.T. Trading, will fill and print data on the voucher. In the simplified procedure, the customs agent had to take over the duties of the customs officer. The number of seals and the number of customs seals were marked on each side of the voucher in the 16th field. Box 18, 20, 21, 22 is information that the customs agent had to enter from the MRN printout from the IE029 message on the ticket vouchers. The MRN document printed from the system was attached to the first and second vouchers.

## 5. SUMMARY

The use of IT systems makes it possible to shorten the time of customs clearance of the goods, and thus reduce the costs incurred by entrepreneurs. The presented legal regulations, as

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