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THE BENEFITS OF UTILISATION COMPUTER SYSTEM FOR MONITORING THE MOVEMENTS OF EXCISE (EMCS)

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ABSTRACT: *Since 2009 - a new system will work fully computerized tracking of shipments to Romania for intra under suspension of excise goods: EMCS, the new system will record all economic validate who are entitled to send and receive excise goods within the EU. If the EU wants a company to deliver products to one of any other Member State, it may check the database if the recipient is a valid one and can work with him. The database will be updated daily and through the new system will simplify existing rules for commercial movements. EMCS is useful in reducing fraud by creating a system of rapid information exchange between customs authorities in the administration of excise duties.*

1. The legislative context of the implementation of EMCS

The Council Directive 92/12/EEC from February 25, 1992 on provisions for products subject to excise duty and holding movement and monitoring of such products, it needs considerable revision.

The purpose of incorporating into the legal basis necessary changes resulting from computerization project EMCS provides the basis for a simple and paperless environment for trade and at the same time allows a better integrity, speed and an approach to risk control for authorities responsible for management and control duty. Starting from these new provisions, other amendments and simplification of the Directive may be deemed necessary, such as introducing new legal concepts.

According to the Commission Decision nr.1152/2003, the European Parliament and the Council of June 16, 2003, the European Commission and EU Member States decided to implement a computerized system for monitoring movements excise goods, to allow Member States to obtain information on real time about the movements and conduct checks required, including during the movement of products.

Legally speaking, the entire process starts with the decision of EMCS in 2003. But for the force, the EMCS will also require changes in EC legislation existence, noting Directive 92/12 and implementation of this legislation.

Legal basis for the development of EMCS is the nr.1152/2003/EC Decision of the European Parliament and Council, dated June 16, 2003 for the computerization system whereby excise duty is transferred between authorized merchants in the Community under the provisions of the suspension.

Commission held a public consultation in 2006 on the topic. Starting from this detailed review will be defined provisions to implement the content of messages and other procedural requirements. The decision requires the development of EMCS within 6 years after publication, July 1, 2009 respectively.

2. Overview EMCS

EMCS is a computerized system for monitoring the movement of goods between Member States. Excise goods can move in two forms: the duty paid or under suspension. EMCS refers exclusively to the movement of excise goods under suspension. Currently, the circulation of excise goods must be accompanied by a document called the accompanying administrative document (AAD) which contains information on transport, origin, destination, or the content and information on administrations and economic operators involved in the movement of goods.

DAI-is issued by sending a copy of it must be sent back to sender by the receiver to close the circuit and to recover the securities. This warranty mandatory for the displaced, which is usually filed by the sender, cover potential tax loss if the goods or part of the goods do not arrive at the destination.

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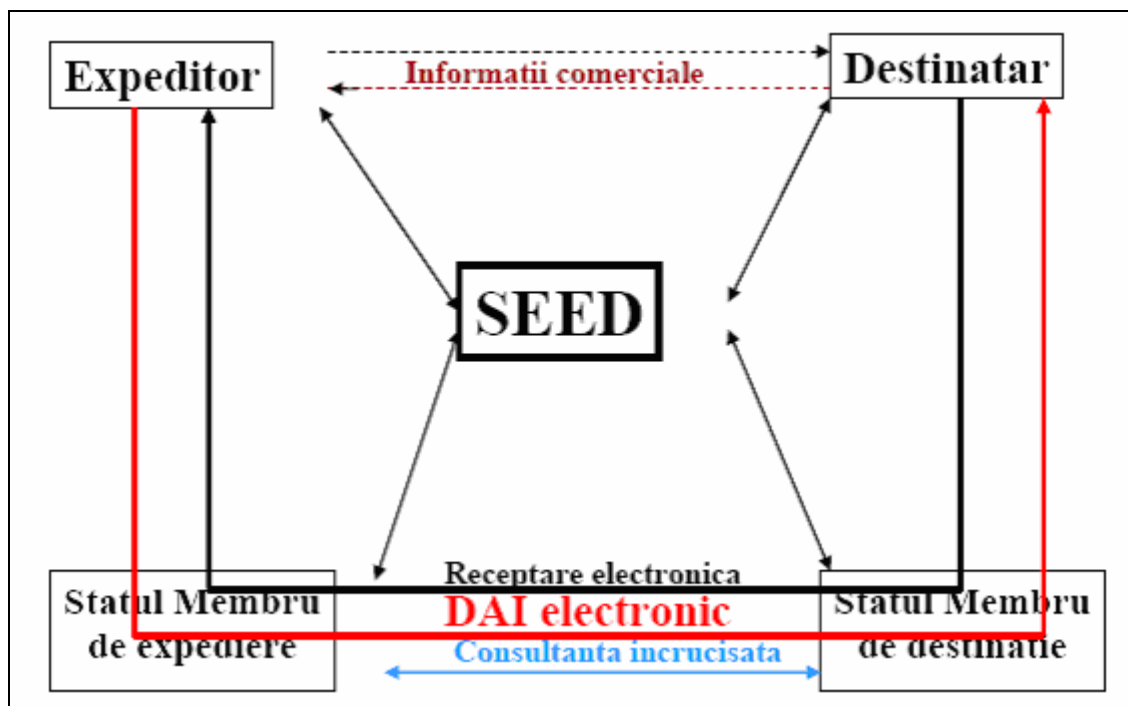


Fig. 1 Simple scheme of operation of the EMCS

The main objective of EMCS is computerization DAI sites on paper. Compared with the current system based on paper, the EMCS will:

- ✓ Allow the transmission and electronic validation of the accompanying administrative document (e-AAD)
- ✓ Enable electronic download of the movement of products;
- ✓ Improve the functioning of the internal market by simplifying the movement of excise goods within the EU, by improving real-time monitoring of flows and doing surveys;

EMCS advantages are:

- ✓ The operators: a quick download of relevant security motion products, and reduce administrative burdens;
- ✓ For Member State administrations: a better monitoring of movement of excise goods, a decrease in the risk of fraud and better coordination of controls.

3. The stages of EMCS implementation

Regarding the implementation of the computerized system in accordance with Fess; EMCS project is divided into several stages and will not work in its entirety from the first day. EMCS functionality has been divided into "packages" that will be made available progressively Member State administrations and economic operators and provision of operational versions of the EMCS will be in about 2 years.

The document that is described EMCS implementation and implementation stages of this specification are called the stretching and project phases (PSS).

EMCS will be introduced in phases from 2003 until 1 2 in 2009 (phase 0 and phase 1, 2), following from that time another phase (phase 3) that covers all the features developed. Each phase has its own management plan.

Phase 0 (2003 - Ongoing) provide operational support, maintenance and improvement of current systems used in field duty, anticipating the operational phase of the EMCS and ensures that these systems are aligned in accordance with the objectives of EMCS.

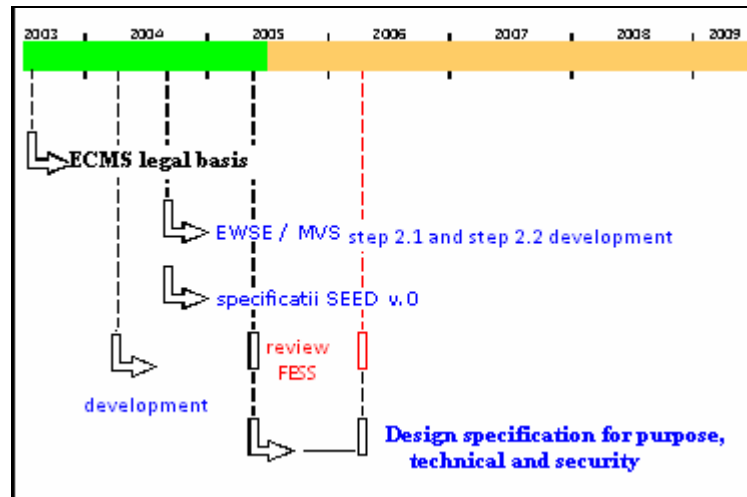


Fig. 2 The scheme is as EMCS stages

Phase 1 (2003 - Ongoing) prepare and welcomed the launch of the project for computerization and production EMCS system specifications of EMCS (ESS). Among various specifications produced in Phase 1, the most important are:

- The functionality covered by EMCS
- Steps of implementation of EMCS.

Phases 2 (2006-2009) and 3 (2007-2011) are the phases of development and implementation, including detailed design of national duty applications, application development and national power, and their implementation in stages. Phase 2 will focus on essential functions necessary to ensure successful entry into operation of EMCS.

Phase 3 will add about customs procedures (such as movements of excise goods under suspension in place of importation and a tax warehouse) and expand the possibilities conferred administrations.

4. The utilisation of EMCS Prototype

EMCS operation can be illustrated by using the prototype that enables the completion of scenarios including specific cases, thus showing users how the system will behave in these cases. The EMCS Business Prototype gives the vision of the various actors on the future system. It shows how they can act and when (states).

Therefore, the prototype highlights:

- The manipulated entities, their content and their life cycle;
- The involved actors, their roles and their capabilities regarding a particular scenario;
- The automated applications, their behaviour through the various processes they must implement and the exchanged messages.

The scenario screen provides the list of available scenarios and allows selecting one of them. Each scenario is briefly introduced and the list of participants is provided.

By clicking on the blue arrow, the storyboard screen is displayed and the selected scenario starts. The EMCS Business Prototype provides various scenarios that illustrate major use cases of the FESS specifications.

A storyboard consists of animations for particular steps of a selected scenario. It provides an overview of flows, exchanged messages, state transitions and functional interfaces. In some cases, you are able to alter the scenario according to the defined alternative flows.

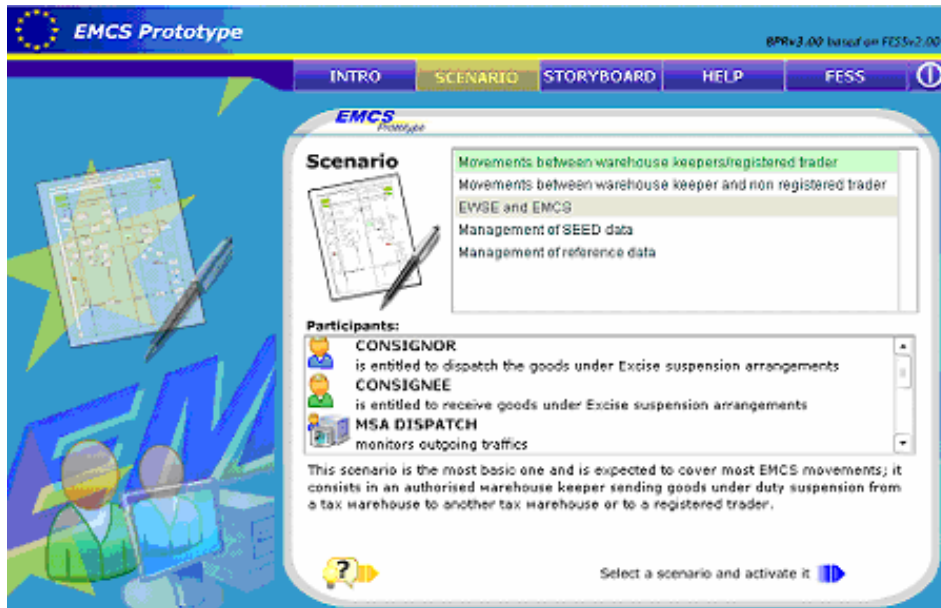


Figure 3: Activate a scenario

The selected scenario takes place somewhere in Europe where traders in various countries exchange products under excise duty suspension arrangements.

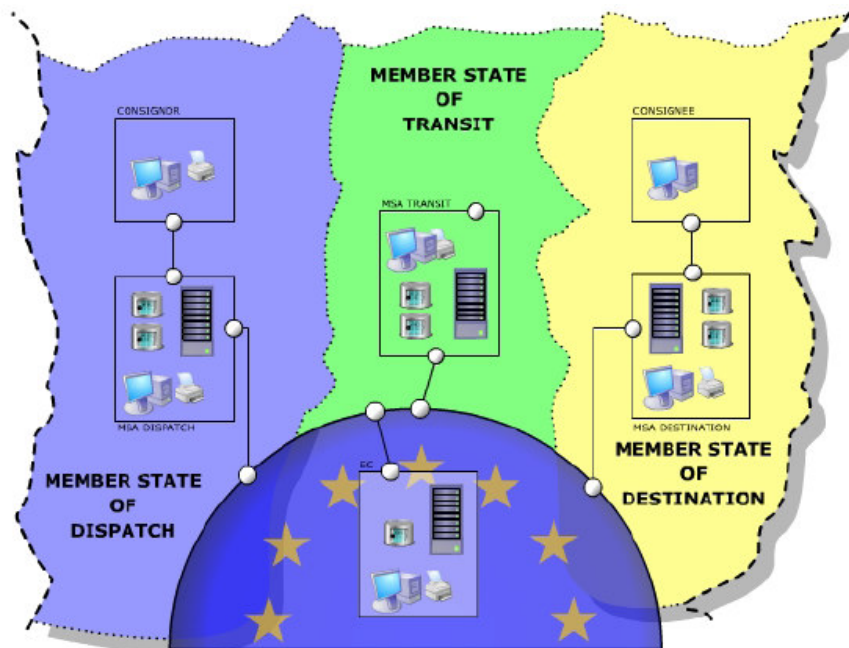


Figure 4: Storyboard (map)

When a step of the scenario concerns a specific actor, the screen indicates the actor's identification and the state of the currently manipulated entity regarding the actor's role. Each item of the list provides the role (i.e. 'CONSIGNOR'), the identity (i.e. 'EO1/MSA1'), the entity state (i.e. 'ACCEPTED') and the state of the concerned actor (i.e. 'Waiting for discharge').

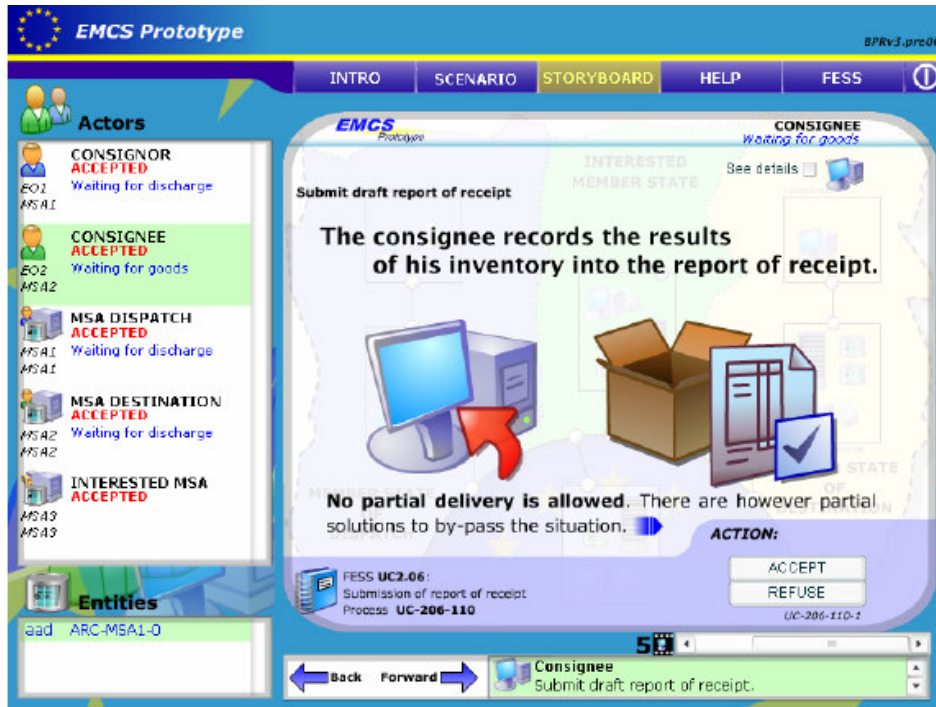


Figure 5 : Actor's action

The displayed state depends on the entity that is currently operated. During a scenario, several entities can appear. A list describes the type and the reference of existing entities. The highlighted item represents the current operated entity. The entities appearing in blue are the ones taken into account during processes. EMCS will introduce electronic processing for declaring, monitoring and closing circuit intra movements of excise goods that are in suspension. This system will replace current procedures based on such papers, current accompanying administrative document (AAD) are supposed to be replaced with electronically processed documents.

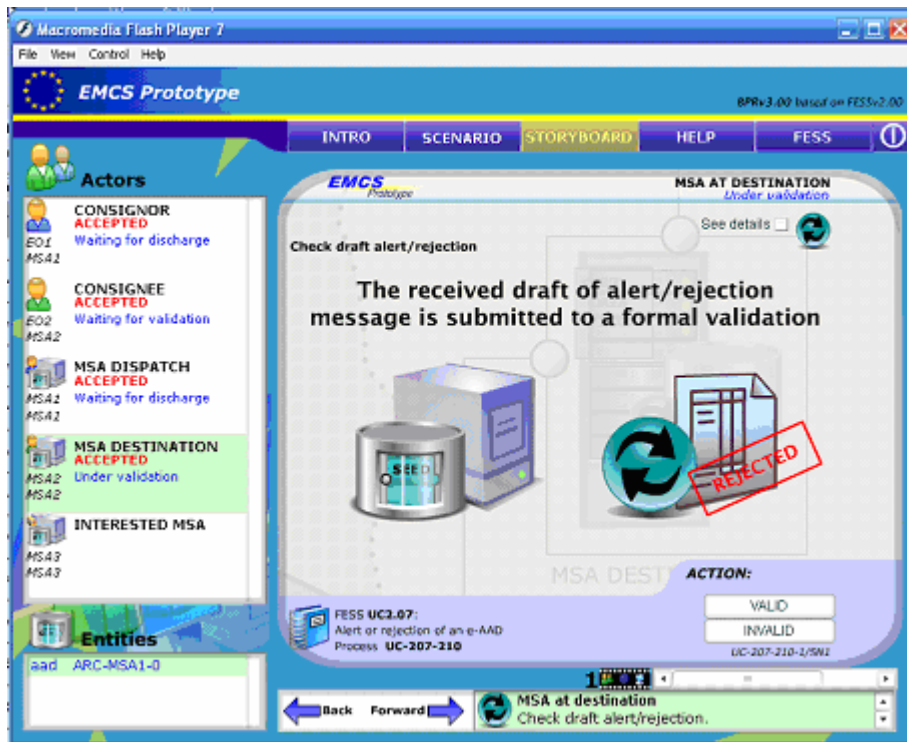


Fig. 6: Control the storyboard

In short, through this system, DAI on paper will be replaced by an electronic recording called eDAI. This record will be created and sent electronically by the sender to recipient. Registration will be received in real time and will be validated by the administrations of Member States of departure and destination. At the time of arrival of products recipient will complete a report of the electronic receipt, which will be sent to the sender for closing the circuit, similarly being informed and Member State administrations.

Conclusions

The implementation of this computerized system, called EMCS - Excise Movement Control System will simplify the intra-Community movement of goods under suspension.

EMCS will allow such electronic monitoring in real time both by Member States and the merchants, deliveries under suspension and will ensure better security of these transactions. It is an ambitious project, which will connect about 100,000 manufacturers, retailers and importers of excise goods (eg alcohol, tobacco and mineral oil) which makes about 4 million annually for the transport and excise duty, by the billions euros, is suspended.

The project is developed stages, the necessary regulations on a number of procedural and technical specifications, legislative changes, software development, to establish a common secure communications networks, and information campaigns for economic operators who will use this system.

The European Commission coordinates the activities of Member States to ensure smooth operation of the internal market. Commission and Member States will have the resources to develop and implement the system, funding is realized EMCS both from Community funds and national funds, depending on the nature of the components developed.

Bibliography

Văcărel I. si colectivul, (2001), - Sistemul impozitelor si taxelor în Uniunea Europeană si în România în „Esen - 2: Un proiect deschis - Probleme ale integrării României în Uniunea Europeană – Cerințe si evaluări”, Secția de Științe Economice, Juridice si Sociologice a Academiei Române, Institutul Național de Cercetări economice, Centrul de Informare si Documentare Economică, pag. 37;

Vătuțiu T., (2004), - „Realizarea si implementarea sistemelor informatice-cerință majoră a societății informaționale”, Conferința Națională de învățământ virtual CNIV-2004, Editura Universității din Bucuresti;

Vătuțiu T., (2004), - „The Information System in the 21st Century”, Scientific Conference -9th Edition-With International Participation, Univ. „Constantin Brâncusi”, - Facultatea de Științe Ingineresti, Editura Academica Brâncusi, Tg-Jiu,;

Vătuțiu T., Popeangă V., (2006), - Rolul informatizării sistemului de impozitare în implementarea acquis-ului comunitar , The Annals of the University of Oradea, Economic Science Series, Tom XV,;

Vătuțiu T., (2005), - „Strategii manageriale de realizare a sistemelor informatice”, Teză de doctorat, A.S.E. Bucuresti,;

Vătuțiu T., Popeangă V., (2006), -Aspects Concerning the Acquis in the Taxation Area within the Context of Romania's Adhesion To European Union, Annals of the University of Petroșani, economics, vol. vi , Universitas Publishing House, Petroșani, 2006 ;

Vatuțiu T., Lungu I., (2007), - An overview of the digital reform in Romania, The Journal of the Faculty of Economics - Economic Science Series ISSN: 1582 - 5485, Year: 2007, Volume: VOL_II, Pages: 940-943

.*** Decision Nr. 1152/2003/EC of the European Parliament and the Council of 16 June 2003 on computerization and monitoring movements of excise goods

*** <http://www.anaf.ro/public/wps/portal>