Abstract

With the ongoing globalization an increase in international deliveries of goods goes hand in hand. All goods produced within a customs union and leave this territory, must be transferred to an export procedure associated with a required customs clearance. This is frequently perceived as an obstacle in the export process. According to a United Nations study, an inefficient customs clearance is responsible for 7% of international trade costs. Hence, governments across the world aim at reducing this administrative effort by introducing electronic customs systems. The paper examines existing ways to electronically declare exports using the example of the German ATLAS system. Based on six selection criteria for enterprise software, these ways are examined regarding their appropriateness from the perspective of small and medium-sized enterprises (SME). The paper concludes that none of them meet sufficiently SME-specific requirements. To tackle this, the paper presents the research project EXPORT and its prototypical implementation.

Keywords

Customs, export declaration, ATLAS, eGovernment, business process management, small and medium-sized enterprises.

Introduction

Background

With the ongoing globalization an increase in international deliveries of goods goes hand in hand. Germany, as one of the world’s leading export nations, could more than triple its export volume in the last decade. This trend can be seen particularly in small and medium-sized enterprises (SMEs), which account for 98% of all exporting companies in Germany (IfM 2012). SMEs are characterized by high innovation and flexibility, and—even on an international level—cooperate with each other.
The export of all goods that are produced within a customs union and leave this territory, must be transferred to an export procedure that is associated with a necessary customs clearance. This results in the submission of an export declaration with subsequent presentation of the goods at the customs. The customs clearance is frequently perceived as an obstacle and interfering factor in the export process. Not without reason, as a United Nations study shows. Accordingly, an inefficient customs clearance is responsible for about 7% of international trade costs (SAP AG 2012).

To tackle this problem, governments across the world aim at reducing administrative effort for declaring export products by introducing electronic customs systems. As an example, the European Commission adopted the eCustoms legislative initiative in 2003. This provides for simplification of customs clearance through paperless, electronic communications and standardizing processing in all member states. Germany implemented this framework regulation by means of ATLAS (Automated tariff and local customs clearance system), which in 2009 replaced the formerly paper-based process and became mandatory for submitting export declarations. The United States developed their Automated Export System, which can be used by American exporters to declare international goods to several federal agencies (United States Department of Commerce 2014). In the Automated Export System, Electronic Export Information replaces the former Shipper’s Export Declaration form. Also Canada launched a comparable electronic system called Canadian Automated Export Declaration (CAED) that became mandatory in April 2012 (Government of Canada 2014).

**Motivation**

While the electronic processing by such systems may integrate well into the IT infrastructure and business processes of large companies, SMEs face difficulties (Delèze and Lattion 2011). Due to often poor IT environments—which for small SMEs usually do not go beyond an email infrastructure—SMEs typically either choose online-based ways to communicate with these export systems, e.g. AESdirect in the United States or IAA+ in Germany, or an external service provider to declare their goods to customs.

As a result, the general objective of electronic export procedures, as for ATLAS the “largely automated handling [...] of the cross-border movement of goods” (BMF 2012c) resulting in an integrated and predictable supply chain has not yet been achieved. Especially for SMEs the process “exporting goods” reveals three poorly integrated sub-processes that are executed manually and characterized by media disruption with separate data management: the sales communication between seller and buyer, the electronic export procedure and the transport or logistics management.

**Research Contribution and Structure of the Paper**

The paper at hand examines existing ways to electronically declare exports using the example of the German governmental ATLAS system. In doing so, the paper first of all introduces into the legal framework as well as the historical development of the export procedure in Germany. Afterwards different existing ways for exporters to take part in the electronic customs clearance process will be outlined. Based on six selection criteria for enterprise software, which are derived based on a literature analysis, the paper examines the appropriateness of the existing ways from the perspective of SMEs.

As the paper will point out by its analysis, none of existing ways meet the SME specific requirements sufficiently. In order to tackle the identified status-quo, the paper presents the idea of the research project EXPORT, which aims at designing an SME-friendly opportunity for the electronic processing of export processes. Therefore, an innovative software is developed that integrates into an existing email infrastructure and augments incoming emails with additional context-sensitive information and recommendations about further business process steps. By analyzing the email-based sales communication between seller and buyer, required information to declare exports can be automatically extracted and passed via interfaces to ATLAS and logistics companies’ systems. This allows for an interactive execution of the entire process “exporting goods” without media or process disruptions.

Generally, this SME dedicated approach is not limited to the German ATLAS system, but can also be adopted to address other electronic customs systems.
The Export Procedure in the Federal Republic of Germany

Legal Framework, Historical Development and European Comparison

For the export of goods from European Union (EU) to non-EU countries the export procedure and the mandatory customs clearance are required. The export procedure is provided as a customs procedure under Article 4 No. 16 letter h) CCC (Community Customs Code) alongside seven other customs procedures (Weerth 2008). Current customs regulation states that for exported goods with a value above € 1000, an export declaration in electronic form shall be reported to the customs administration. On the basis of the discussed elimination of the € 1000 threshold from 2015 it is to assume that there will be a sudden increase in the number of export declarations. In particular, SMEs increasingly have to handle the electronic processing.

Since establishing the European Economic Community (EEC) in 1957, efforts to simplify and harmonize the customs procedures in the member states have been made. In this sense, many recommendations and directives have been put in place. A breakthrough was the manifestation of the community guidelines and regulations in the Community Customs Code, which took effect on 1 January 1994. Its modernized version, newly valid since 24 June 2008, requires electronic data exchange for all customs declarations. Various national solutions to conduct an electronic export declaration were already existing. They allowed to electronically submit customs declarations with the help of IT processes, and to electronically release goods for export. Examples include SAGITTA in the Netherlands, the CHIEF-New Export System in the United Kingdom or Zoll online in Austria. However, these were isolated applications which worked only in the respective member state. Since 2006, the single European export declaration has been created on an electronic platform, which is called the Automated Export System (AES) (Weerth 2008).

The introduction of the electronic export declaration in the then 27 member states followed two steps: In the first step, the link between the customs authorities of all 27 member states to one another was completed (Export Control System — ECS). This took place until the end of 2007. In the second step, all economic operators were linked with the customs administrations of all member states (Automated Export System — AES). This happened in the period from 2008 to mid-2009. Since the electronic export procedure technically builds on the NCTS (New Computerised Transit System), the existing technical structures in the 2500 previously associated customs offices could be accessed. In Germany the AES is implemented in the administrative procedure ATLAS-Export; it is in use since August 2006.

ATLAS – Automated Tariff and Local Customs Clearance System

ATLAS stands for the IT process of the German customs administration, which provides the communication between businesses and customs offices on the basis of electronic data interchange. For participation in ATLAS various conditions and formalities are to be fulfilled or necessary (Weerth 2008). In order to ensure a certain transitional period for reorganization and familiarization, the customs authorities allowed the operation of the paper-based export procedure with the Single Administrative Document (SAD) in parallel to the electronic export procedure with AES until mid-2009. However, since 1 July 2009 the electronic delivery of the export declaration in the EU is mandatory (BMF 2012c). As a result, one significant change by ATLAS-Export or AES is the elimination of the SAD in favor of an export accompanying document (EAD), which contains an 18-digit Movement Reference Number (MRN) and a barcode (Weerth 2008). The trend towards automation and mechanization and the reduction of media disruptions is hence pursued in the customs administration. The handling with ATLAS should therefore also be used for direct integration into the business processes of companies.

Existing Ways to Electronically Declare Exports to ATLAS

Subsequently, the four existing ways to electronically declare exports to the German ATLAS system are introduced as well as characterized.

Agent-based model

For the purpose of the electronic customs declaration, companies can engage an agent, which complies with Article 5, paragraph 1 Community Customs Code (CCC): “any person may appoint a representative in
his dealings with the customs authorities to perform the acts and formalities laid down by customs rules.” For completing electronic customs clearance, representatives must be given the company’s EORI-number (Economic Operators’ Registration and Identification number). Then, the data for any declarable transaction can be transmitted, e.g., in the form of commercial invoices. In accordance with these data and signing with his own participants identification number (BIN) the representative submits a customs declaration on behalf of his principal (Oberfinanzdirektion Karlsruhe 2007). Hence, this model outsources both the technical and professional expertise to carry out a customs clearance. According to a 2009 customs study, 13% of the surveyed companies often or always use this model for export (MATerna GmbH 2010).

Dedicated software and ERP modules

There are numerous dedicated software solutions, which handle the compliant generation and sending of EDIFACT messages. In addition, many of these products offer additional functionalities and interfaces to existing enterprise software. Any software must be certified once (see BMF (2012b) for a list of certified software products); modifications to the software, e.g., following the introduction of a new ATLAS release must be certified retrospectively. Dedicated software can be subdivided into stand-alone software modules and software which integrates into existing ERP systems. ERP modules stand for a special case of ATLAS software. These solutions are fully integrated into the company’s ERP system and usually originate from the same provider. Examples for ERP-integrated customs clearance include SAP’s “Global Trade Services” extension and Infor’s “XDEX”.

Online service provider

Alternatively, an online service provider can be engaged. In contrast to the agent-based model, this service does not act as a representative within the meaning of Article 5 No. 1 of the CCC, but relates to an Application Service Provider (ASP), which operates the software on its own IT infrastructure and delivers functionality to the customer via the Internet. For shipping and export procedures, companies can appoint a technical communicator (Bundeszollverwaltung 2012). If this is used, companies do not need their own BIN and do not have to be registered as ATLAS participants. The technical communicator generates the EDIFACT messages and forwards them to the responsible customs data center, signing them with his BIN. Thus, by identifying himself through his BIN in any transaction, he acts as a participant within the meaning of paragraph 1.2.4 of the ATLAS process instruction.

By referring to the EORI-number of the client company in the messages, he does not appear visible to the customs offices and acts as a technical service provider. The system automatically delivers response messages from the customs to the technical communicator, which has to ensure transmission to the client company (principal).

Internet customs declaration IAA+

The Internet customs declaration IAA+ is an ASP solution for the customs declaration which is provided by the customs administration free of charge via the Internet. For this procedure participants need a separate EORI-number, but no BIN. Also, they do not have to register as a user of ATLAS software. However, the participants require an ELSTER certificate, which originally was intended only for the electronic tax declaration in Germany. This certificate replaces a handwritten signature. Furthermore, the portal allows its users to maintain their stored master data. The response messages sent by the customs offices can be viewed in multiple mailboxes and the EAD can be downloaded (BMF 2012a).

Development of Software Selection Criteria for SMEs

The previously presented ways for participating in the ATLAS processes are rated in the following section based on six criteria that can be generally applied for software selection emphasizing SME characteristics. These criteria have been derived from different literature sources that are referenced throughout the following subsections.
Criterion 1: Low total cost of ownership

Klüpfel and Mayer state that the software selection in SMEs is primarily a question of costs. Therefore, a binding budget for any IT project has to be determined early (Klüpfel and Mayer 2010). This is supported by the result of a study, in which 85.7% of the surveyed SMEs place monetary aspects above qualitative aspects for their decision (Lanninger 2009). In literature, there is generally consent that in principle, not the original costs, but the total cost of ownership (TCO) must be considered.

Criterion 2: Usability

Another important criterion in addition to the monetary perspective is a high degree of usability. According to Schmidt, IT is intended "to facilitate the ongoing work" (Schmidt 2003), but often it would rather hinder a productive work due to lacking usability. He points out a demand for ergonomic software in particular for SMEs (Schmidt 2003). The user interface had to be intuitive and coherent according to a market research report, to be accepted by the user and to ensure a high level of productivity, which is associated with lower training costs and support (MetaGroup 2005).

Criterion 3: Customizable range of features

Good software solutions for SMEs are also characterized by the fact that the range of features is customizable. According to Schmidt, it is necessary "to filter out unnecessary complexity" (Schmidt 2003). Usually only two thirds of the functionalities of a software are actually used (Klüpfel and Mayer 2010). The objective is to customize a software according to the real demand. In order to align standard software to the operational processes and requirements, there must be extensive, yet easy usable customizing options (Schmidt 2003).

Criterion 4: Integration

Glöckle (2006) states that "the application landscape in the companies [...] is characterized by heterogeneity." Therefore, he calls for a high level of integration of all applications, so that the data exchange between all parts of the resulting complete system is easily possible (Glöckle 2006). Klüpfel and Mayer (2010) claim for the compatibility of the application with the used operating and database system. Furthermore interfaces should be made to other business applications and also to the used office suite. Only in this way multiple data entries, which are time-consuming and error-prone, can be avoided.

Criterion 5: IT security

Especially in the eGovernment the IT security plays a major role. Hereby not the fault tolerance is meant, but the protection of privacy in data transmission and storage. This includes a transparency of all processes to make the trustworthiness and security to the user visible (Riedl 2004). Riedl claims to use a “global digital identity”, which is used to uniquely authenticate and replace signatures, to ensure a safety E-Government. Kraft and Seidel (2004) identified problems with IT security in particular by SMEs, which they explain by carelessness, lack of knowledge and excessive demands of the people in power.

Criterion 6: Process support

A solution for electronic export processing should ideally not only support the individual activity of the export declaration, but according to the increasing process orientation the entire business process of an export. In addition to a passive support by the availability of data—the required data for the export declaration must not be costly searched from various sources—also an active support is necessary. Thereby concrete recommendations for the efficient execution of the current process step as well as sensible future steps are presented for the responsible employee. These recommendations, for example based on best practices, can improve the process in terms of time and quality.

Evaluation of Existing Ways from an SME’s Perspective

Since for each existing way—except for IAA+ as the tool provided by the German customs authorities—a variety of concrete implementations from multiple vendors exist. In the following, not the "best case" is
considered here, but a representative average. This appears plausible for SMEs, which usually do not buy the optimal solution, because of their limited resources and their often poor selection process with missing market overview. A positive assessment requires an above-average performance for the criterion, an average performance is neutral and below-average performance or the absence is rated negative.

**Low total cost of ownership**

The lowest total cost of ownership can be found in the IAA+ declaration. This solution is offered free of charge by the customs authorities on the Internet, so that neither implementation costs nor updates and maintenance charges accrue. Online Service Providers receive a neutral rating because they are basically not available for free. This means you only pay for your actual number of transactions. Also available flat-rate models are usually of no interest to SMEs. In average such online service providers are asking for €300 connection charges as well as €5 transaction fees (ZNET Systemhaus GmbH 2012). In-House Solutions receive a negative rating. Single user licenses for ATLAS software are available for an average of €3000 (Nomina GmbH 2012); ERP modules are mostly priced above this, because they often offer a complete export and import management. The agent model is settled on the same financial level and thus also to be evaluated negative. Here the functional as well as the technical part of the customs declaration is delegated and not executed within the company. Thereby prices arise starting from €35 per declaration which is substantially higher than for example in an online solution (Oberfinanzdirektion Karlsruhe 2007).

**Usability**

The agent model fulfills the criterion of usability best by completely outsourcing the process. Also the solution with the ERP module is rated as user friendly, since the user interface is identical in most cases with the remaining components of the ERP system. So the user must not get used to a new interface. New software as well as the online solution require training. Notes to the customs terminology and assistance for the input are often present. The usability is rated neutral, because ergonomics differ from product to product. IAA+ is clearly structured, declarations can be saved and resumed later and all completed declarations will be archived. Also there are explanations of the input fields resulting in a positive rating.

**Customizable range of features**

A large and at the same time adaptable to the respective company range of functions is most likely available at the agent solution. This range can be optimally adjusted to the actual state of the company and only information, which is actually needed, is requested from the employees, so that unnecessary complexity is avoided. ERP modules provide a similarly well customizability with a wide range of functions. Proprietary customs software usually offers a certain number of customizing options, whereby this again differs from product to product. IAA+ only provides forms, options for customizing are completely absent. This leads to a negative rating. Online Service Providers are rated neutral, because like ATLAS software they offer some customizing options with a great range of functions.

**Integration**

A high integration is provided by an ATLAS module of the used ERP system. Data replication is avoided by using an ERP system and the exchange of data with other modules like the material management is guaranteed. In a proprietary customs software interfaces to other applications are often available, but this is not the case with all products and usually only the most common applications are considered. IAA+ always requires a manual filling of all data. Interfaces to other applications are not available. The Online Service Providers, which are mostly browser-based, can only offer a minimal integration with other applications. The agent solution gets a negative evaluation since the agent is not always integrated into the enterprise IT and receives all data and documents via email, fax or post, whereby media breaks occur.

**IT security**

This criterion is met by IAA+ in particular by using ELSTER certificates for authentication and an SSL-encrypted communication. This solution is considered as the safest of all. Rated neutral is the Online Service Provider, because instead of transmitting the message directly from the company to the relevant
customs office the message goes first through the data center of the service provider. The use and security of the data is not transparent to the user. The in-house solutions, where the data is sent directly via FTAM or X.400 to the respective customs office, guarantee a high security and are rated positive. Rated negative is the agent solution. The risk is highest here, because usually all relevant data are given unencrypted to a third party.

**Process support**

Of the current solutions a process support can only be stated for the ERP modules. ERP systems are specifically designed to support the user in a process-oriented way. So it is possible to link the export processes with other activities and to access the same data sets. In particular IAA+, Online Service Provider as well as special ATLAS software are only designed for the processing of export declaration itself, without referring to neighboring activities, which is why they are rated negative.

**Figure 1. Overview of the evaluation result**

Figure 1 summarizes the evaluation in a matrix. It is clear from this that the agent solution and IAA+ are most suitable of the existing solutions for SMEs. The implementation as an ERP module is only profitable for selective (greater) SMEs due to the significant cost burden. Given the significant financial burden and the lack of integration, the agent-based solution is only practicable for very low export volumes. In a customs study, only 8% of the companies stated to exclusively rely on this solution and have no other access possibilities to ATLAS (MATERNA GmbH 2010). The lack of integration by IAA+ is a big disadvantage. 9% of the companies surveyed use the Internet customs declaration for all declarations (MATERNA GmbH 2008). However, only 50% of companies are satisfied with IAA+, which can be explained by the disadvantages outlined above.

**EXPORT—A Dedicated SME Approach to Declare Exports to ATLAS**

**Typical Export Business Scenario in SMEs**

The following scenario outlines a typical procedure of SMEs in the export of goods due to the characteristics of the existing ATLAS implementations.

A small sized company occasionally exports its produced final products to non-EU countries. Due to the small size of the company there is no extensive IT landscape. So it cannot fall back on the available software solutions on the market that integrate ATLAS in ERP systems. However, to make the necessary electronic export declaration, the company mostly manually uses the online-based IAA+ platform. This proves to be a very time consuming process, because the person responsible has to request the required data potentially from various colleagues and partly by looking at Excel lists (e.g. goods tariff numbers). Afterwards the data must be manually entered in the IAA+ platform and resubmitted to a transport company for the eventual export after receiving successfully the report of export. Therefore, if it comes to time constraints in the company, the company will make use of external service providers. But the
payment of their service performance lowers the profit margin of the SME and as well consumes the time resources, since the allocation of relevant documents and information as well as answering any questions of the service provider are not negligible.

**System Concept of EXPORT**

To foster e-customs as a typical eGovernment initiative, it is essential to develop a solution for the status-quo in the customs clearance process for SMEs as identified in the last section. Such a solution must take into account both the technical and organizational characteristics of SMEs. The approach outlined below is currently developed in the research project EXPORT, which is funded by the German Federal Ministry of Economics and Energy. The aim is to provide an innovative solution for SMEs allowing them to benefit entirely from the electronic customs clearance.

![Diagram](image)

**Figure 2. Main Functionalities of EXPORT and its Schematic Architecture**

As already pointed out in the first section, the majority of relevant information for the customs declaration has already been communicated between seller and customer before. For SMEs, this is in most cases done via email. The email infrastructure therefore has valuable information available. The EXPORT tool is simple to integrate into existing email infrastructure. After installation, it extracts the required information from email conversations and generates an ATLAS declaration automatically subsequent to a successful sell. If some piece of information is missing, the tool supports the user during the data input. As an example, it is referred to the product tariff numbers that are a challenge especially for SMEs. Appropriate search mechanisms as well as the automated building of a repository for mapping the own product portfolio to the respective numbers address this problem. As soon as the ATLAS system successfully assigned a unique MRN on the EAD, this number can be forwarded together with the already available information to the cheapest logistics service provider. This happens via an appropriate interface connection and finishes the process.

An integrated process component supports the process execution starting from the customer request up to the communication with the logistics service provider and the product deliverance to the foreign customer. Thereby, it also allows for a retrospective view on the executed export processes. In summary, SME are enabled to cover the currently existing disadvantages in this section of the supply chain in an autonomous, straightforward and inexpensive way.

The main functionalities of the software system to be developed within the research project EXPORT as well as a schematic representation of the system architecture are shown in Figure 2.

**Prototypical Implementation of the EXPORT System**

Figure 3 shows the user interface of the EXPORT system, which is a proof-of-concept of the previously outlined concept. In the following, this figure serves as a feature illustration (for more technical details it is referred to Krumeich et al. (2014)).
The prototype hooks into Microsoft Outlook and intercepts the incoming and outgoing email traffic. Based on email analyses, the system determines whether incoming emails relate to already running export processes or whether a new one has to be initiated. In more detail, emails are either assigned to existing processes—where they can constitute a next process step—or they are considered as starting events triggering new processes. The information whether an incoming email is part of an already instantiated export process or a completely new one, is displayed to the user including the underlying process ID (cf. Figure 3, A).

In accordance with the principles of process guidance, the system derives recommendations for further steps to be followed by the exporter in order to achieve an optimized process result (cf. Figure 3, B). For example, if certain export forms are needed for the respective country of destination, the user will be informed accordingly (cf. Figure 3, C).

In addition to process guidance, the system assists the user in conducting export declarations considering the given context: In the example in Figure 3, the EXPORT system has detected that a customs declaration is required to ship the order to the customer’s subsidiary in Argentina. Thus, by clicking on the process step recommendation “Customs Declaration”, the system extracts required information from the overall email communication to fill out a customs form mostly automatic (cf. Figure 3, D).

The system also provides the possibility to send email drafts that are context-sensitively selected, enriched and recommended to the user (cf. “Send quotation’). Furthermore, if other software systems are used within the enterprise, e.g. ERP systems, components can be integrated that transfer information out of the email to these systems. In the particular case, external systems of logistics providers can be intervened to conveniently trigger the shipment process.

**Figure 3. Screenshot of the EXPORT System**
Related Work

The European research project ITAIDE (Information Technology for Adoption and Intelligent Design for E-Government) addressed the challenges concerned with making eGovernment processes more secure while keeping the administrative expenses at a low level. In doing so, the project particularly focused electronic customs processes and simulated resulting changes in the business process execution within four Living Labs (Tan et al. 2006b). In the course of the ITAIDE project, Tan et al. (2006a) analyzed the challenges that software systems are facing to support electronic customs declaration processes in Europe and presented possible software solutions. In doing so, they focused the technological level, in which the integration of systems based on different standards is a crucial point. In addition, they also considered the process level regarding required process redesigns as well as the social level emphasizing the system’s acceptance. Furthermore, Burgemeestre et al. (2009) proposed a decision support system in the context of ITAIDE. However, their system does neither support the actual customs declaration nor clearance process, but the application process of exporters to become authorized economic operators. Yet the paper underlines the advantages of system-generated recommendations within customs-related processes.

Singh and Sahu (2008) proposed an “m-government” system dedicated for mobile devices bearing in mind that mobile devices are globally more widespread than common computers nowadays. One of their system’s use case is the customs declaration, which can be directly made via SMSs. While they took India as an example, Salehi (2012) considered Iran as another example for customs processes in developing countries. In doing so, they developed a framework for the electronic customs clearance for dedicated use in the developing world (ASYCUDA - Automated SYstem for CUstoms Data) and also integrating mobile devices as well as emails as a means for customs operations.

A stronger usage of web-based systems (e.g. SOA and web services) throughout electronic customs processes is proposed by Razmerita and Bjorn-Andersen (2007). They particularly emphasized the exported goods themselves, which will be traceable by attached RFID tags continuously transmitting their current status within the export operation. Further research focus the area of electronic customs from a customs authorities’ point of view. In this regard, Ponision et al. (2008) addresses the question how data exchange should be organized between different countries.

In the area of mining process-relevant information from email messages, several research can be found. Van der Aalst and Nikolov (2007) developed their EMailAnalyzer tool that generates standardized XML files containing process-relevant data based on the analyses of email messages. Their technique realizes process mining based on emails which is conventionally only possible based on dedicated event logs. However, they have not implemented a fully automated process classification, since users still have to add tags to individual email messages. Beseseo et al. (2012) proposed an approach capable to extract ontologies and thus machine-readable knowledge out of emails. In doing so, emails are automatically assigned to certain categories (e.g. meeting, support, news) and analyzed to retrieve information based on patterns dedicated to these categories.

Conclusion

The paper at hand introduced into the electronic processing of export operations using the ATLAS system, which is obligatory since 2009. This development, away from the previously paper-based processing, was a further step towards a more efficient eGovernment. Therefore, this article highlighted the opportunities that exist for the participation in the ATLAS system and evaluated this from the perspective of SMEs. It was found that SMEs still have problems in the automated processing of cross-border movement of goods.

Based on this problem, this article outlined the research project EXPORT funded by the German Federal Ministry of Economics and Energy, which aims at developing a software system that seamlessly embeds itself into the existing email infrastructure of companies. The system extracts relevant export information from the email conversations and generates the ATLAS export declaration after a successful completion of a purchase. This creates the basis for SMEs to cover this part of their supply chain independently, easily and inexpensively and to benefit from the advantages of electronic processing.
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