ASYCUDA Newsletter

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Editorial

This publication of the ASYCUDA newsletter coincides with the 70th anniversary of the United Nations with the theme "Strong UN. Better World". As emphasized by General Secretary Mr. Ban Ki-Moon on February 2nd 2015 during his welcoming speech, the theme "captures the importance of multilateralism and the essential role of the United Nations".

ASYCUDA, UNCTAD's largest technical assistance programme has a direct role in this multi-lateral approach by automating customs procedures and facilitating economic cooperation between member states. Automation of customs procedures is an integral part of the Agreement for Trade Facilitation adopted at the WTO (World Trade Organization) meeting in Bali in December 2014. Among the criteria identified by WTO in this agreement is the publication of available information, transparency, accurate and timely publication of duties and taxes for import and export, electronic payment for the reduction of clearance times and cooperation between entities at the border. Over time, WTO members will need to conform to all criteria for the Agreement on Trade Facilitation.

In order to assist member states to be in line with WTO recommendations, the ASYCUDA Programme is implementing a Web Portal in each country. This portal is open to all and contains not only features for the public aimed at transparency and the sharing of information but also private features requiring authorized credentials. These specific features contribute to national and international trade facilitation.

In this newsletter we will show the most recent and important features of the ASYCUDA Web Portal around the world. These features include:

1) Portal content management (Content Management System - CMS) with online user manuals and a dynamic configuration of the portal interface;
2) Online integrated tariff and taxation simulation;
3) Direct integration of electronic manifests via XML;
4) Online tracking of e-document status (manifest, declarations..) for follow up of goods clearance ;
5) Pre-arrival notification of yachts;
6) Online analytical processing (OLAP) for customs office chiefs and managers;
7) Online public statistics;
8) Implementation of web services e.g. electronic payments of taxes directly from the portal by brokers;
9) A link to the ASYCUDA e-learning platform (eASY-Learning);
10) Calendar of upcoming international events;
11) Digital map of customs offices;
12) Capture of an inspection act and generation of an exit note on a mobile device (tablet, smartphone etc.);

This guided tour of the features provided by ASYCUDA Web Portals allows us to travel through the various countries that have implemented a portal. Each feature presented is illustrated by screens taken from different countries. We will visit Fiji, Solomon Islands, Bangladesh, Gibraltar, Jamaica, Grenada, Trinidad & Tobago, Albania, St-Pierre and Miquelon, Jordan, Afghanistan, Liberia and Burundi.

We invite you to send any comments you might have to asycuda@unctad.org.

Division on Technology and Logistics, ASYCUDA Programme, Geneva, June 2015.

Ce numéro de la lettre d'information de SYDONIA coïncide avec la célébration du 70ème anniversaire des Nations Unies sous le thème d' "une ONU forte pour un monde meilleur". Comme l'a souligné le Secrétaire Général M. Ban Ki-Moon le 2 février dernier lors de son allocution de bienvenue à cet évènement, ce thème "dénote l'importance du multilatéralisme".

SYDONIA, principal programme d'assistance de la CNUCED, s'inscrit dans cette logique de multilatéralisme en automatisant les procédures douanières, facilitant ainsi les échanges et coopérations économiques entre les pays. En effet, l'automatisation des procédures de dédouanement fait partie intégrante de l'Accord de Facilitation des Echanges adopté à la réunion de l'OMC (Organisation Mondiale du Commerce) à Bali en décembre 2014. Parmi les critères identifiés par l'OMC dans cet accord, figurent la publication et la disponibilité des informations, la transparence, la discipline dans la publication des redevances et impositions imposées à l'importation et à l'exportation, le paiement électronique pour l'accélération du temps moyen de dédouanement et la coopération entre les organismes présents aux frontières. A terme, les pays membres de l'OMC devront se conformer à tous les critères de l'Accord de Facilitation des Echanges.

Afin d'aider les pays dans leurs efforts de conformité avec les critères identifiés par l'OMC, le Programme SYDONIA met en place un Portail web dans chacun des pays. Ce portail accessible à tous contient des fonctionnalités visant entre autres la transparence et le partage d'information mais aussi des fonctionnalités privées nécessitant identification (nom d'utilisateur et mot de passe) qui contribuent à la facilitation du commerce national et international.

Dans cet article, nous verrons en détail les fonctionnalités les plus importantes installées dans les Portails Web SYDONIA à travers le monde. Parmi les fonctionnalités essentielles, nous comptons:

1) la gestion du contenu du portail (Content Management System - CMS) par la mise à disposition de manuels d'utilisation et un design du Portail adaptable;
2) le tarif intégré et le simulateur de taxes;
3) l'intégration directe de Manifestes électroniques par l'importation de fichiers XML;
4) le suivi en continu des statuts des documents douaniers (Manifestes, Déclarations,…) pour le suivi de la procédure de dédouanement des marchandises;
5) la notification de l'arrivée de yachts
6) le traitement analytique sécurisé et privé de données en ligne (OLAP) pour les chefs d'unités et hauts responsables;
7) la publication de statistiques publiques;
8) la mise en place de Services Web permettant par exemple le paiement électronique des taxes directement depuis le Portail par les déclarants.
9) un lien vers la plateforme e-learning du Programme SYDONIA (eASY-Learning);
10) la publication des évènements internationaux à venir dans un calendrier;
11) la carte des bureaux de dédouanement;
12) la saisie sur un mobile (tablette, smartphone,…) de l'acte d'inspection et la génération du bon de sortie.

Dans la suite de cette lettre d'information, chacune des fonctionnalités énumérées ci-dessus est accompagnée d'exemples de pays. Ces fonctionnalités sont illustrées par des écrans de Portails Web SYDONIA. Nous nous rendrons aux Iles Fidji, Iles Solomon, au Bangladesh, à Gibraltar, en Jamaïque, à Grenade, Trinidad & Tobago, en Albanie, à St-Pierre et Miquelon, en Jordanie, en Afghanistan, au Libéria et au Burundi.

Nous vous souhaitons une bonne lecture de cette lettre d'information et vous invitons à nous adresser vos commentaires sur **asycuda@unctad.org**.

Division de la Technologie et de la Logistique, Equipe du Programme SYDONIA, Genève, juin 2015.

ASYCUDAWorld Customs Portal

Customizable, Responsive, HTML5 and CSS3

CONTENT MANAGEMENT SYSTEM (CMS)

A Content Management System (CMS) is a set of processes and technologies that supports the collection, managing, and publishing of information in any form or medium. ASYCUDA Portal is an example of a CMS where every feature can be accessed, monitored and published without prior knowledge of Web Programming. Below is an example of ASYCUDA Portal in Solomon Islands where guidelines and documentation have been uploaded for users and the Web page adapted so the block "RECENT NEWS" is displayed on the right of the page.

Figure 1: Example of Content Management System in Jamaica and Solomon Islands as seen with smartphones and tablets

Below is a second example of ASYCUDA Portal in Bangladesh implemented using a CMS. We can see from the Home Page how the Portal has been designed by customizing the header, the tabs and the content published grouped in blocks (Chairman, ASYCUDAWorld, News, events…).

Figure 2: Example of Content Management System with ASYCUDA Portal in Bangladesh

Below is an example of ASYCUDA Portal in Burundi. This CMS has been customized slightly differently from the first ones. Indeed, has been integrated a background which makes the portal more user-friendly. The design of the Web page is also different focusing on the fast accessibility of data with reduced number of blocks for each tab.

Figure 3: Example of Content Management System with ASYCUDA Portal in Burundi

INTEGRATED TARIFF AND DUTY SIMULATOR
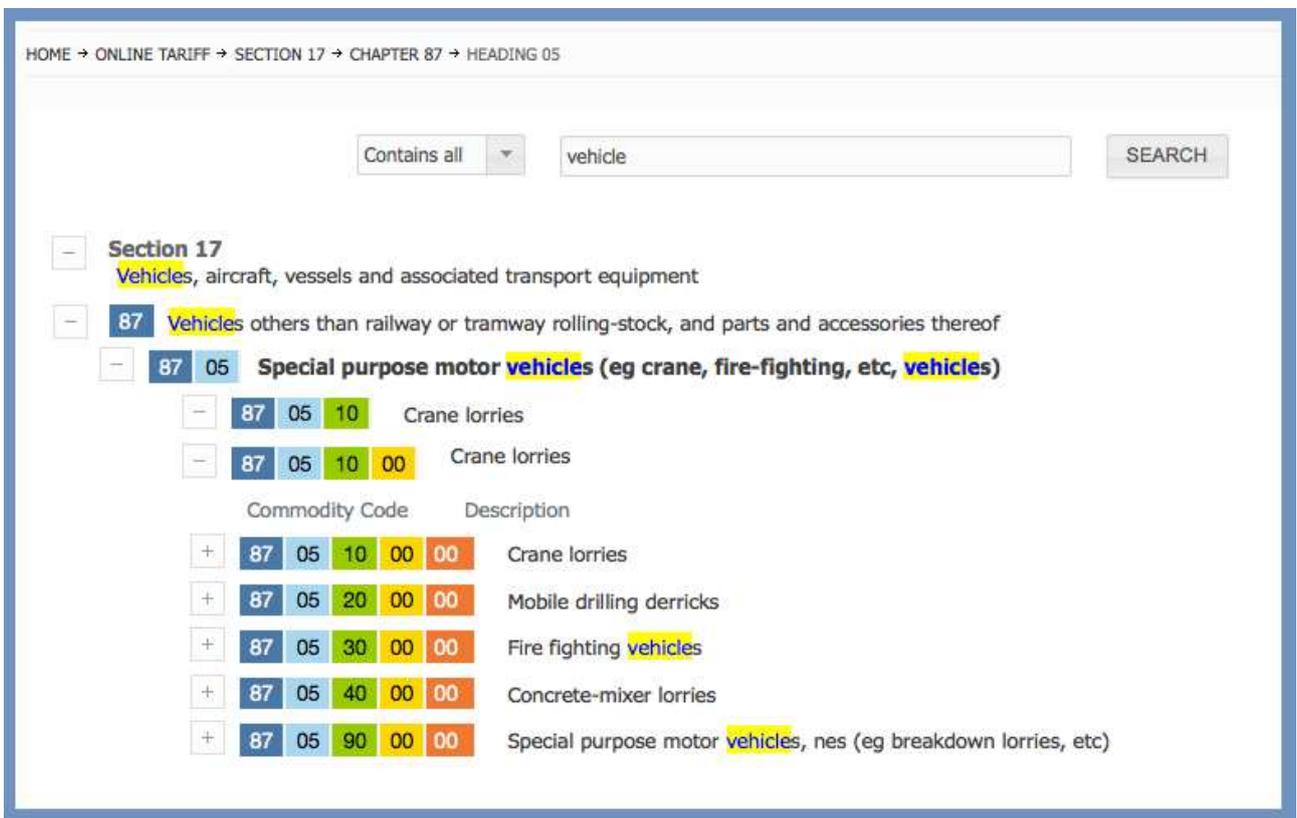
Figure 4: Integrated Tariff Search engine within the ASYCUDA Portal

Figure 5: Integrated Tariff from Afghanistan ASYCUDA Portal

The Online Tariff service provides real-time information on HS Tariff to end-users accessing the ASYCUDA Portal (Figures above are taken from ASYCUDA Portals in Fiji and Afghanistan). Information on HS Tariff includes detailed information on sections, chapter, HS codes, regional and national codes as well as units of measure and tariff rates.

Moreover, the Integrated Tariff comprises a duty simulator feature which simulates taxes to be paid (Figure below is taken from ASYCUDA Portal in Trinidad And Tobago).

Figure 6: Example of the Duty Calculator on the Online Tariff

Figure 7: Duty Simulator from Portal of Trinidad and Tobago

Upload e-Manifest to Portal (Online XML File Integration)
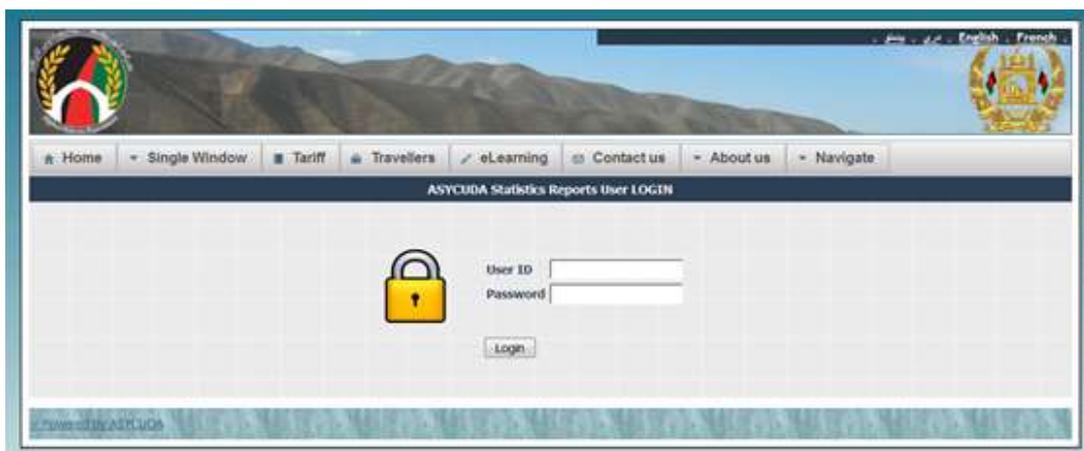
Figure 8: Secured and protected access to some features in Afghanistan ASYCUDA Portal

A user with secured and protected profile on the Portal can directly upload e-Manifests by just dropping an XML file to the portal's Import Manifest XML file feature. The figure above is taken from ASYCUDA Portal in Afghanistan and shows how to securely login to the Portal

The figure below is an example of such feature in Bangladesh.

Figure 9: Uploading of e-Manifest feature by dropping an XML file within Bangladesh's ASYCUDA Portal

INSPECTION ACT FOR MOBILE

ASYCUDA Mobile is a web application that has been designed for mobiles and tablets (iPhone, iPad, Samsung tablets and other Android based devices). Pages have been styled to fit into small screens. The mobile application for Inspection Act allows inspectors to fill in the inspection act directly from the field rather than once they are back to the office. The benefit is clear: faster and more accurate process and complete the supporting documents for the inspection.

Figure 10: ASYCUDAWorld on Mobile

The Inspection Act for mobile allows inspectors to use a table/mobile device in order to clear declarations that have been selected red.

From the home menu of the ASYCUDA Mobile application, inspectors will access the Inspection Act for Mobile clicking on "Retrieve Inspection Act". They will be then asked for the declaration

details in order to clear the declaration (Custom Office, Serial, Number, Year). Once the declaration is cleared, the inspection act is created by the ASYCUDA Server and an interface for inserting the details of the inspection is shown on the screen.

After the inspection act has been validated the system will ask the inspector to re-route the declaration to blue or green.

An inspection act can be amended different times if needed.

This interface has been designed to fit into small screens. Ideally it should be viewed via a tablet but it could be also accessed via smartphones, as shown in the next image.

Figure 11: Creation and Validation of the Inspection Act using a Mobile

DOCUMENT TRACKING

Figure 12: Document Tracking (Declarations & Manifest) in Fiji's ASYCUDA Portal

The Document Tracking service provides real-time information on e-documents and reference table to end-users accessing the Customs Portal (Figures above and below) as well as internal information for ASYCUDA. The figures 13, 14 and 15 are taken from the ASYCUDA Portal in Albania and shows the tracking of documents like receipts and declarations.
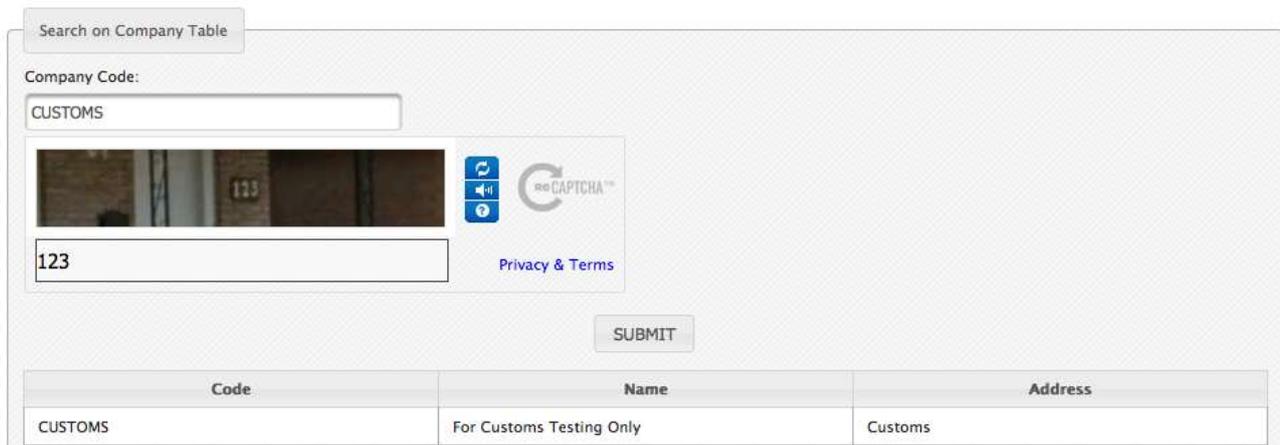
Figure 13: Search Company Table Feature from ASYCUDA Portal in Bangladesh

Figure 14: Documents Tracking in Albania's ASYCUDA Portal

Figure 15: Retrieving Receipts in Albania's ASYCUDA Portal

Figure 16: Retrieving a Declaration by entering its barcode in Albania's ASYCUDA Portal

PRE-ARRIVAL NOTIFICATION FOR VESSELS

In order to facilitate clearance, individuals who sail to ASYCUDA Country may provide information on Crew, Passengers and Stores by way of an e-declaration before the estimated time of arrival (ETA) of the vessel in ASYCUDA Country. This is in line with international conventions and best practices.

This system facilitates the activities of HM Customs, the Gibraltar Port Authority and the Borders & Coastguard Agency, whilst making Gibraltar a more attractive commercial and leisure hub for vessels. It allows users to submit the names of crew and passengers as well as other details in advance, hence reducing clearance times on arrival. After registering, users will have the ability to store their vessel's information and reuse the data to create new notifications.

Figure 17: Pre-Arrival Notification for Vessels Process detailed in Gibraltar's ASYCUDA Portal

Figure 18: Entering Passengers' information in Gobraltar's ASYCUDA Portal

Figure 19: Entering Vessel's information in Gibraltar's ASYCUDA Portal

Figure 20: Vessels' Pre-Arrival Notifications and Status

Figure 21: Example of e-Document online for pre arrival vessel information that allows for subsequent modifications

ONLINE ANALYTICAL PROCESSING (OLAP)

The service for online analytical processing (OLAP) provides features for the analysis of data stored in the ASYCUDAWorld database.
The OLAP service has been divided into different section:
1.   Execution of chart: this section will be used by allowed users that need to see the results of the different queries, which can be designed for
   a.   trade statistics
   b.   monitor and evaluation

2.   Dashboards: this section regroups different statistics/diagrams into a single page. Diagrams are

interactive and per each diagram it is possible to view the data table containing the values depicted in the diagram. Data tables can be exported in Excel format in order to be further manipulated.

3.   Administration of queries and diagrams: this section is designed for IT/functional officer that will create statistics and diagrams based on the requests they receive.

The navigation page displays all saved reports/diagrams organized according their category. The following image shows a list of 4 reports defined for the category 'Trade Data'.
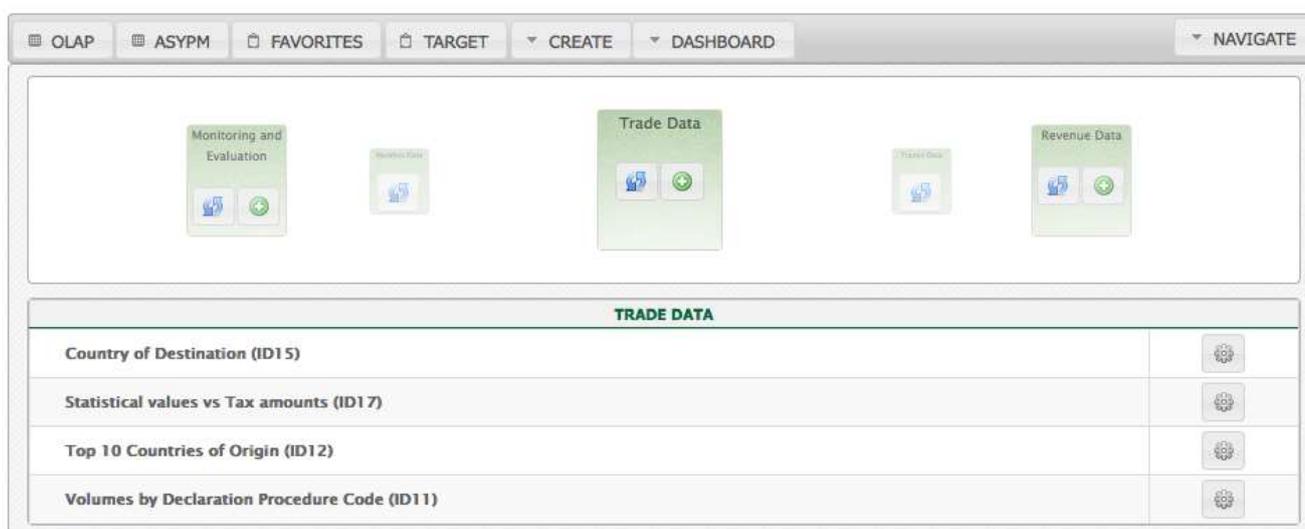
Figure 22: Saved Reports defined within the Trade Data Category within the ASYCUDA Test Portal in Liberia

You can use the refresh button to refresh the list of saved reports for a given category and the plus button to open the list of available OLAP interfaces

for report creation for that category. The following example shows two buttons for the category 'Trade Data':

Figure 23: Creation of Reports within the ASYCUDA Test Portal in Liberia

The OLAP interface to create new reports is divided into the following 4 main areas:

•   Main chart
•   Parameters pane

•   Period panel
•   Chart panel
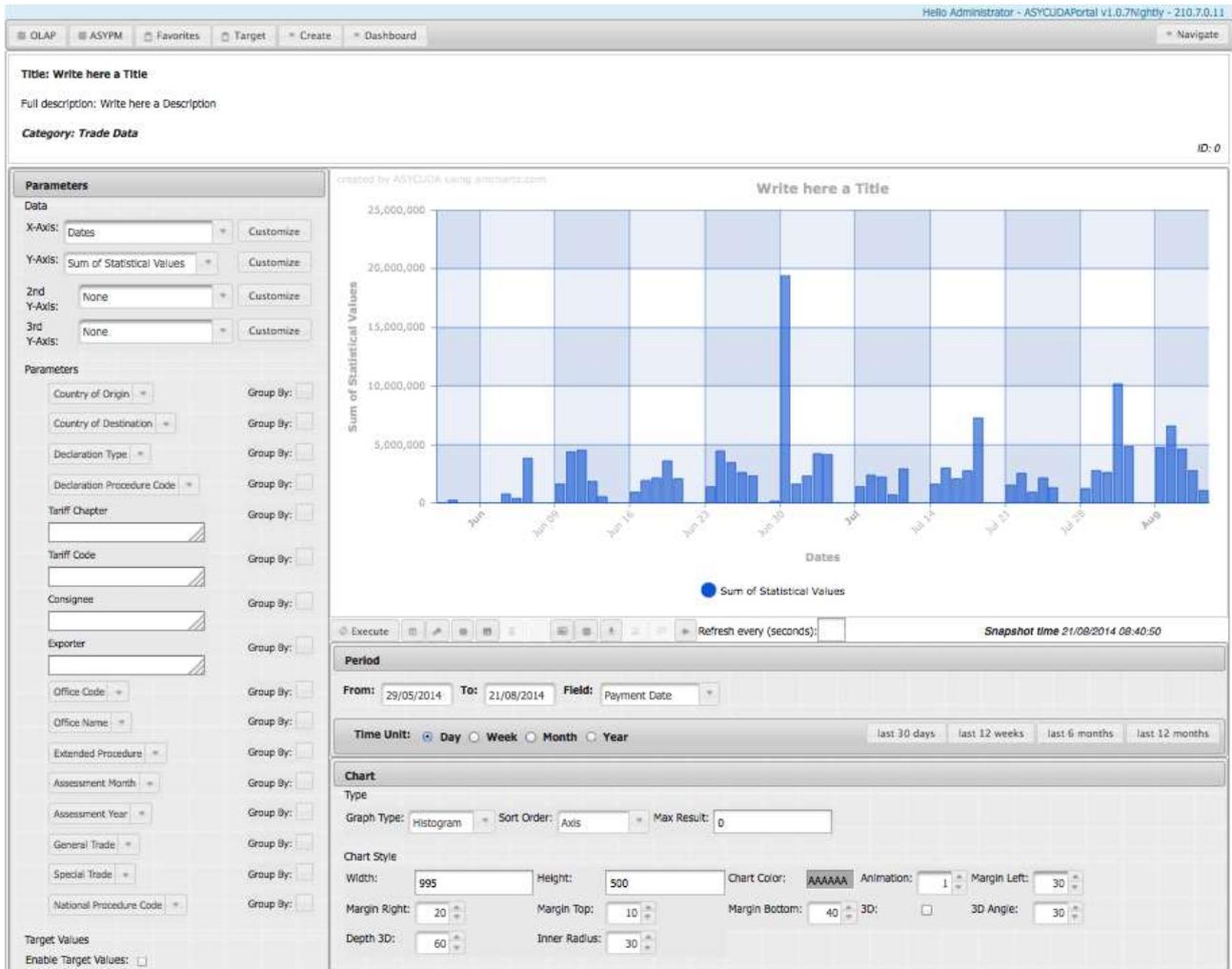These are shown in the next picture:

Figure 24: OLAP Interface to Create New Reports within the ASYCUDA Test Portal in Liberia
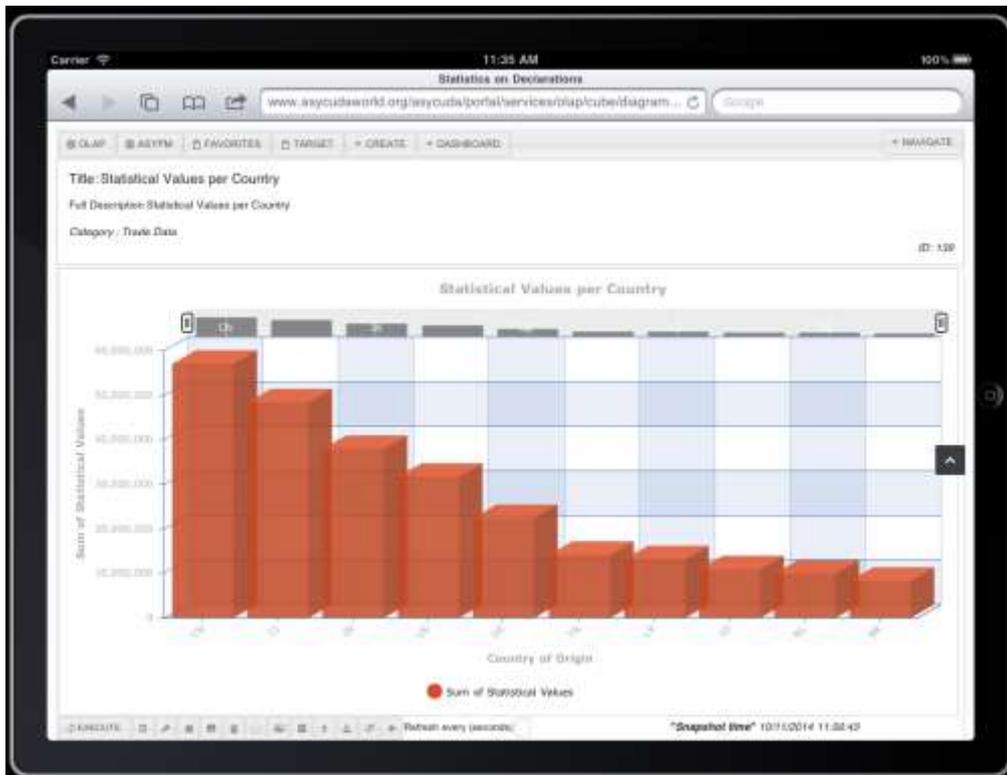

Figure 25: OLAP diagram accessed from a tablet

PUBLIC STATISTICS

The Portal can also display public or private statistics on Customs such as the number of manifests registered during the current year or the number of assessed declarations within a year for a specific commodity code. In Saint-Pierre and Miquelon, users are allowed to request statistical information on the declarations assessed within a specific year. After selecting the parameters, the Portal displays a table with public statistics related to the parameters entered.

Figure 26: Public Statistics Table by Country in Saint-Pierre and Miquelon

WEB SERVICES

A Web Service is a program that can be accessed remotely using different XML based languages.

An example of Web Service is the electronic payment of duties and taxes directly from the Portal. The electronic payment on the Customs System can be designed around the concept of Prepayment Account. Every Trader will create one or many prepayment accounts within the system and will deposit an amount of money required in order to be able to pay for declarations he/she wants to clear. Every time the Trader submits declaration for clearance the system will decrease the required amount for clearance from the Trader's prepayment account.

The electronic payment on the Customs System can be configured to communicate with the private banks. Every time a transaction is made towards the Customs' Bank Account a notification must be sent from the bank to the Customs System. This is shown in Phase I of Figure below.

When Declarations are submitted for clearance the Customs System will automatically process them if the required amount is available on the Trader's prepayment account (Phase II in Figure below). Based on the daily activities at Customs, the Customs Cashier will transfer money from the Customs' bank account to the Treasury.
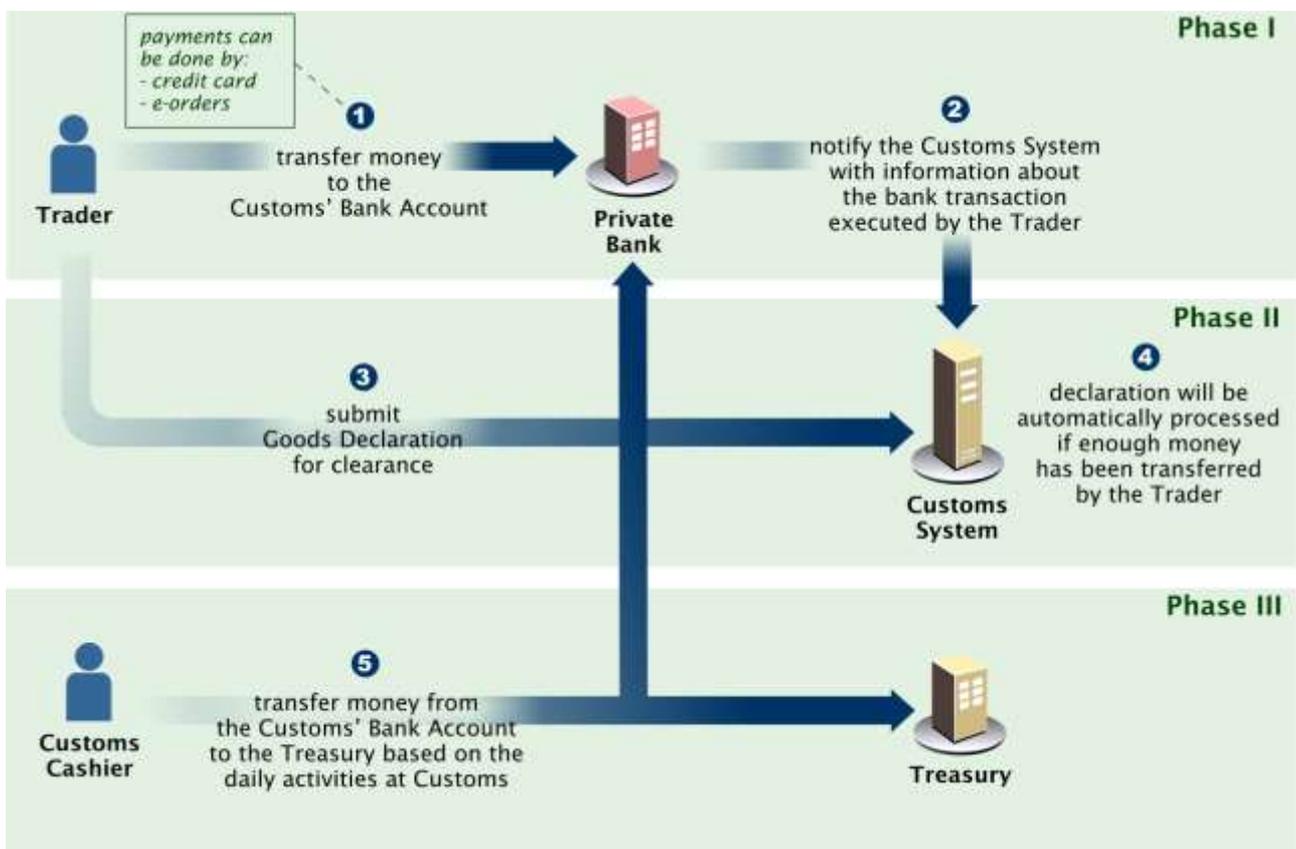

Figure 27: Electronic Payment Process

Another example of Web Services is the update of Reference Tables. Indeed, an interface is implemented between ASYCUDAWorld and an external system (POSA), which manages the registry of companies and needs to update the company table in ASYCUDAWorld. When a record gets modified in the external system, it is sent to ASYCUDAWorld server. Finally, we can also mention the Web Service for exchange of Manifests. In order to improve maintainability and decreasing the effort for the client in invoking the web service, it has been decided to reuse the XML defined for the ASYCUDAWorld Fast Cargo Integration (FCI) module.

The document describes how trade operators or other entities involved in trade transactions could interact with the system by submitting data for electronic processing of transactions. The document defines the data structure and data elements required to fulfil Customs formalities and other trade-related governmental requirements.

Many other Web Services have been implemented like for example the ASYCUDAWorld XML Customs Release Order Message Format which grants release orders on importation or exportation once all Customs formalities are satisfied and regulatory requirements are met.

The figures below are examples of Web Services implemented within ASYCUDA Portal in Albania. The first one lists all available Web Services for users like the e-Application for licenses and authorizations. The second allows users to retrieve receipts after an e-payment just by entering information on the receipt. Finally, the third one retrieves e-Declarations by entering the Barcode.

Figure 28: Example of SOAP Logs in the Web Service Administration Page

ONLINE APPLICATION FOR USER ACCOUNT

Users can request an account with protected password to access the Portal and all its confidential and secured features related to his profile and his category of user (Warehouse Operative, Ships Operator…). Some of the confidential features are for instance the access to reference tables or status of e-documents being processed. Basically, any feature can be secured by requesting a username and password so confidential data are accessible to users with according rights.

The image below is a description of all steps for a new user to get a protected account in Gibraltar.
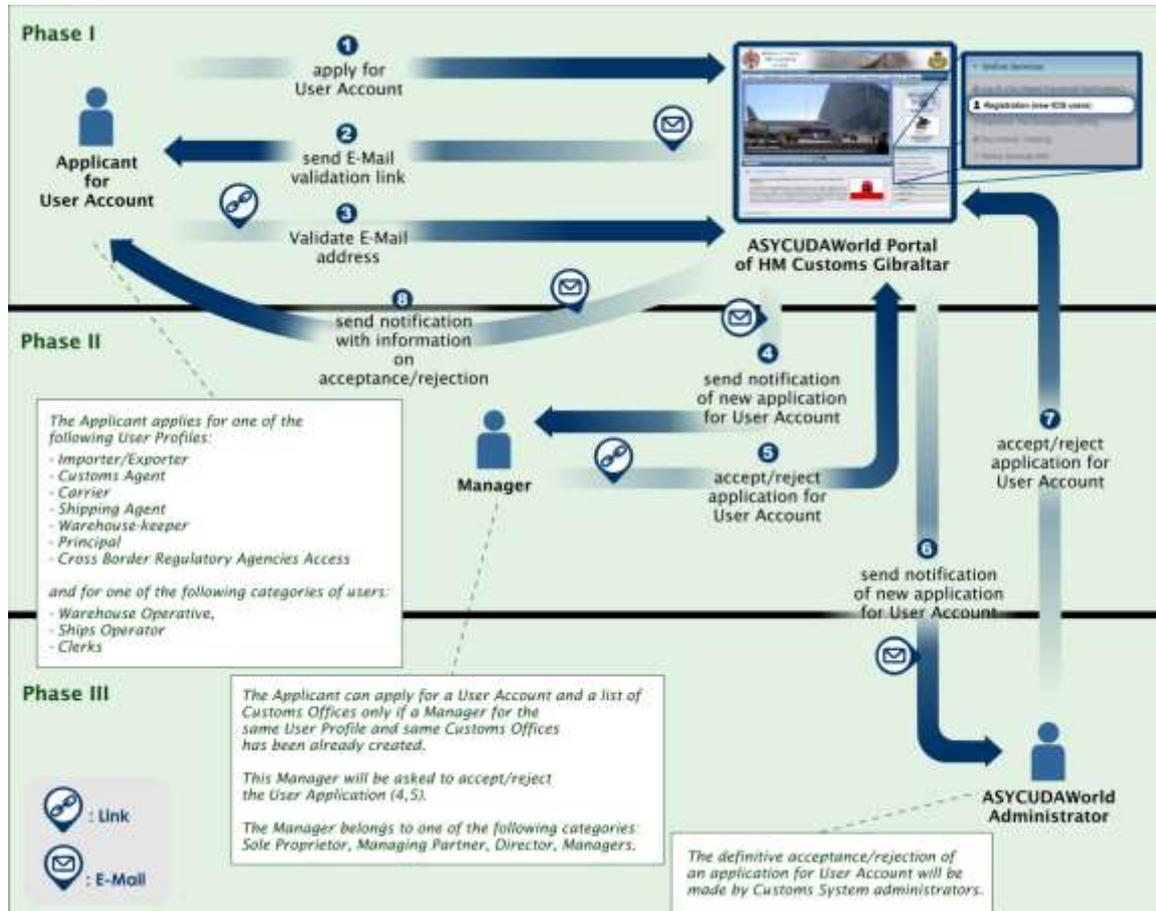
Figure 29: Online Application for User Account Process
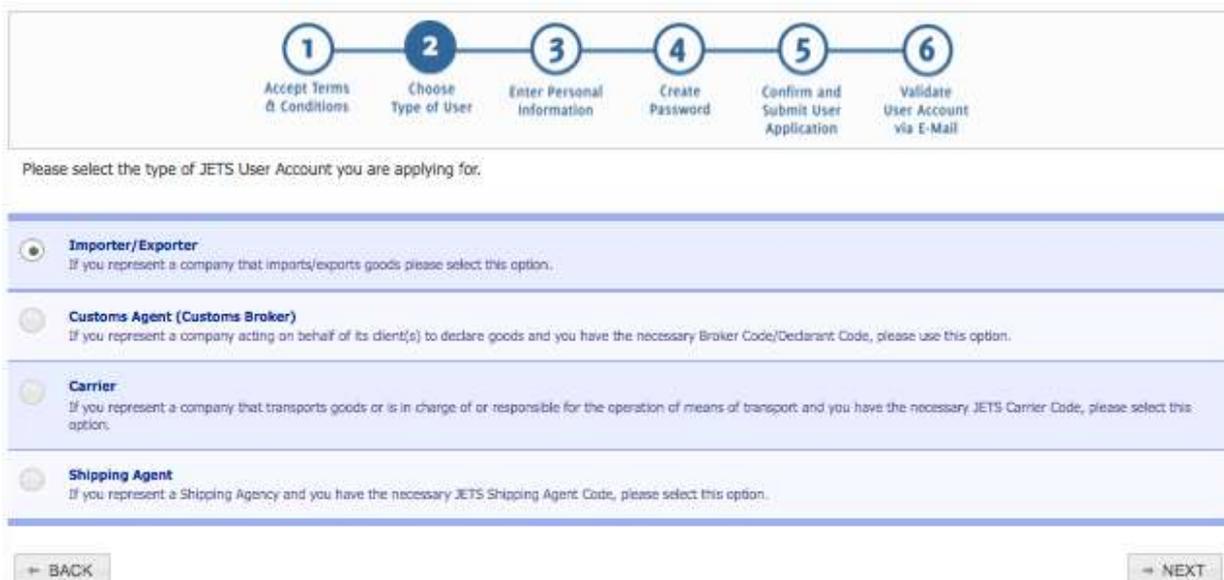
Figure 30: Online Application for User Account Wizard

Figure 31: Online Application for User Account - Step 3 - as implemented by the Jamaica Customs Agency

EASY-LEARNING
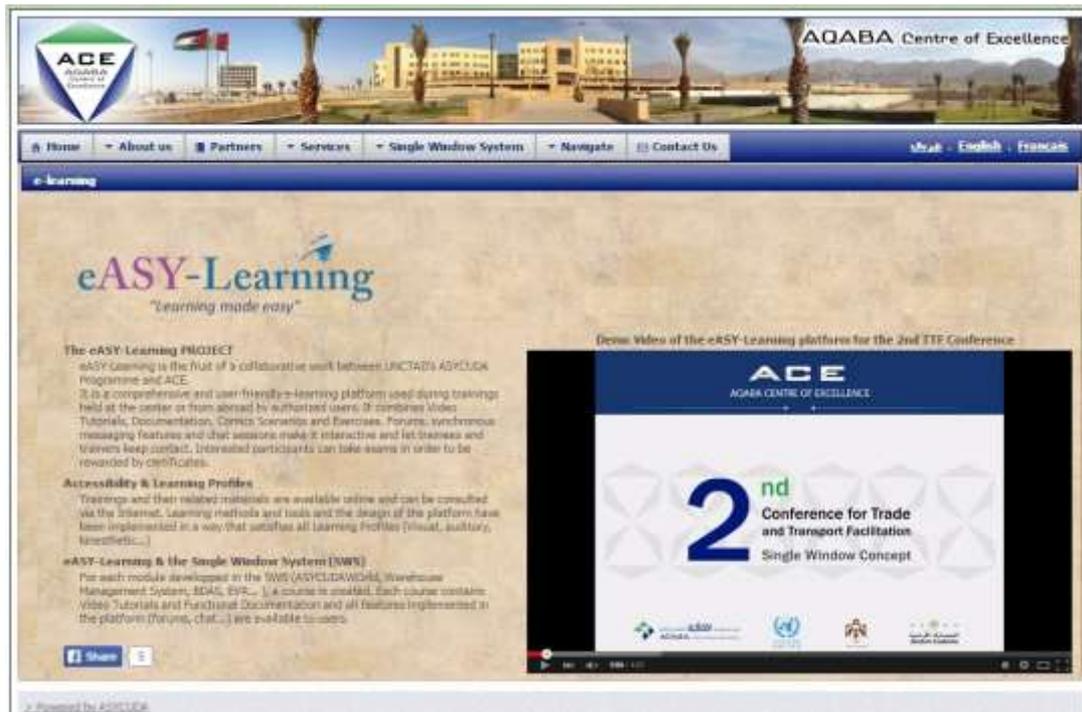
Figure 32: eASY-Learning description and link within the ASYCUDA Centre of Excellence in Aqaba, Jordan

eASY-Learning is the ASYCUDA distance learning platform. It contains video tutorials, theoretical and practical exercises which are a complement to the ASYCUDA Functional Training to ASYCUDAWorld provided by ASYCUDA experts. The platform requires authentication and the Portal can integrate a link to the platform. Above is a snapshot of the eASY-Learning tab of the Aqaba Centre of Excellence Portal which contains a link to the e-learning platform. The images below are taken directly from the eASY-Learning platform (www.e-asylearning.net/training/moodle/); the first one is the eASY-Learning platform homepage showing 2 ASYCUDAWorld Functional Training courses, one in French the other in English, the second image is the homepage for the English ASYCUDAWorld Functional Training course.

Figure 33: eASY-Learning Platform Homepage

Figure 34: eASY-Learning Platform - Main page of the ASYCUDAWorld Functional Training course

EVENT CALENDAR & CUSTOMS OFFICES MAP

The Event Calendar is a common requested feature from Customs because it shows transparency and gives information to everyone. It consists of a calendar showing all events to come in the future. By just clicking on an event in the calendar above, a description is displayed to get more information on the events to come.

Relevant information to economic operators, importers and exporters can be reached via the Portal like the Customs Offices Map. The user finds relevant information on each customs office in the country strengthening information sharing and availability within customs.