



Developed by CIAT / NORAD









# HANDBOOK



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# Version 1.0







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# THE DIGITAL ECONOMY AND THE DEC SYSTEM



From the final reports of the OECD in its BEPS Action plan, in 2015, it was concluded that it is not possible to precisely delineate the digital economy, given that it is becoming, more and more, the economy itself.

However, the digital economy and its business models present some key characteristics, which are relevant from a fiscal perspective, namely: mobility of intangible assets, users and business functions, the importance of data, network effects, the proliferation of business models, multifaceted business, the tendency to monopoly or oligopoly, and volatility.

Many companies have embraced global business models, centralizing functions regionally or globally rather than country-by-country. Even for small and medium-sized companies, it is possible to be "micro multinationals" that operate and have staff in multiple countries and continents.

Among the different business models of the digital economy, e-commerce, application stores, online advertising, cloud computing, participatory network platforms, high-frequency trading, intermediation of products, services, and currencies, online payment services, and many other activities stand out.

#### **TAXATION OF THE DIGITAL ECONOMY**

As a response to the need for tax administrations around the world to incorporate taxation of the digital economy into their tax systems, the working group led by the Organization for Economic Cooperation and Development - OECD, the Inter-American Center of Tax Administrations - CIAT, the Inter-American Development Bank - IDB, the World Bank - WB and the European Union - EU, have recommended the implementation of the value-added tax (VAT) as the first stage of taxation, which will allow the collection and control of the tax generated by cross-border transactions carried out through digital means.

One of the first steps that tax administrations must take to achieve this objective is to establish or adapt the tax regulations that establish tax obligations in the case of supply of goods, digital and intangible services, by foreign suppliers without physical presence, through digital means, for which it is essential to clearly identify in the law, the spatial scope of application of the normative, the activities considered as taxable events and the obligated subjects, under the figure of taxpayers, responsible and third parties.





To achieve effectiveness in the implementation of the consumption tax on digital activities, international guidelines recommend adopting the principle of destination when establishing connection links to tax goods and services in consumer jurisdictions, establishing, consequently, obligations taxes for foreign suppliers, even when they do not have a physical presence in said territories.

Establishing tax regimes aimed at foreign suppliers without a physical presence in the countries of consumption is an action to develop the principle of tax equality, which allows maintaining equity in the economies of the countries since it balances the conditions in which suppliers abroad compete with national suppliers. In addition, it strengthens the

fiscal sovereignty of the countries in which foreign suppliers generate value through their activities.

#### DEC SYSTEM (DIGITAL ECONOMY COMPLIANCE)

The Inter-American Center of Tax Administrations - CIAT, with the financial support of NORAD (Norwegian Agency for Development Cooperation), in the quest to facilitate the implementation of effective mechanisms for the application of the tax to the digital economy, developed a technological registration system simplified and in compliance with tax obligations for the management of the tax regimes of the digital economy, which consists of a computer tool, low cost, open-source and fully parameterizable, which allows implementing the administrative management of the VAT applied on the digital transactions.

This tool was designed in order to be used for the effective implementation of mechanisms that allow implementing the administration of indirect taxation of the activities carried out within the digital economy, through the Value Added Tax, by the tax administrations with limited financial resources to carry out implementation processes for this type of tax.



# ADJUSTMENT OF LEGAL FRAMEWORK



#### **GENERAL ASPECTS**



The DEC system is a technology tool designed based on international recommendations and best practices shared through the guidelines developed by the OECD, which serves as a mechanism for the practical application of the tax management processes required by the tax administration, to the administration of the value-added tax caused by the supply operations through digital means, of goods, digital and intangible services, carried out by foreign suppliers, without a physical presence in the country.

#### LEGAL NORMATIVE

The DEC system is the ideal solution available for the tax administrations of the countries that are in the process of adapting their tax system or that have already incorporated the necessary norms to establish the tax on the digital economy, in the form of taxation of the consumption, through the adaptation of the value-added tax, or through the creation of a special tax on digital activities.

#### **DESTINATION PRINCIPLE**

To establish a tax on cross-border digital operations, the best international practices recommend adapting the tax legislation adopting the destination principle, which allows the taxation of transactions carried out on goods, services, and intangibles supplied from abroad that are consumed in the country.



#### **TAXABLE ACTIVITIES OR TAXABLE EVENTS**

In relation to which operations must be taxed, the regulations must be adequate to qualify as taxable events the different activities carried out within the digital ecosystems. The OECD guidelines indicate two viable qualification methods, the restrictive one, which consists of establishing an express classification of the activities that will be subject to the tax, and the extended one, which refers to the establishment of generic concepts, which allow covering almost all of the operations carried out by providers of goods, digital services, and intangibles. This last method is the most recommended because it allows the taxation of digital transactions with a wide spectrum of applications, makes the tax regime fairer and allows the taxation of new business models that continue to be created, without the need to modify the legal regime again.

The general, non-limiting classification allows establishing the tax on transfers classified as:

- Operations with low value goods
- Supply of digital and intangible goods
- Provision of digital services
- Supply through digital platforms
- Use of data and online advertising
- Brokerage of sales, goods, currencies and services

## LIABLE SUBJECTS



The legislation must clearly establish that this tax regime is designed to qualify as taxpayers of the tax foreign suppliers of digital and intangible goods and services, who carry out supply activities from abroad, without maintaining a physical presence in their consumers' jurisdiction. For this reason, it is essential to have the adoption of the destination principle in the tax system, since it is the mechanism that attributes the competence to impose tax obligations on foreign taxpayers, without the need to require that they have physical, legal representation, or a permanent establishment in the country.

#### LIABILITY REGIME

Once the constituent elements of the tax have been defined, such as the connecting links of the activities with the territory of the destination country, the taxable events, and the obligated subjects, it is necessary to have included into the regulations governing the tax, a simplified regime of tax obligations, which allows the correct implementation of the tax, comprising registration, declarations, payment, and reporting obligations.

The guidelines indicate that experience has shown that regimes that establish less complexity further stimulate compliance and voluntary payment by transnational corporations.



# FUNCTIONAL SPECIFICATIONS



The DEC<sup>1</sup> is a Web system that has two worksites, the Taxpayer Portal and the Administrative Portal of the Tax Administration.

#### TAXPAYER PORTAL

The taxpayer portal is the system that allows the taxpayer to interact with the tax administration, and has the following functionalities:

# **1 Taxpayer registration:**

Allows the taxpayer to register with the tax administration. The interested party or obligated party must complete their registry information, which is organized into several subject areas: general data, tax data in their jurisdiction of residence, contact data, operations carried out by the taxpayer in the digital economy, tax vector, vector of reports and supporting documentation and acceptance of the terms and conditions. This registration is reviewed and, if applicable, approved by the tax administration officials. If the registration is not approved, there are mechanisms to contact the taxpayer, informing

#### those data or information that must be corrected or provided.



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<sup>1</sup> DEC: Digital Economy Compliance





## **2** Electronic mailbox:

This feature implements within the system the electronic mailbox for taxpayer notifications and records each action that the Taxpayer performs in the system; for example, the filing of returns, the presentation of reports, the updating of data, and other actions that generate an electronic notification that is received by the taxpayer both in their email and in the DEC mailbox.



Notifications (1) Messages: 17	Showing 1 to 15	Showing 1 to 15 of 17 entries			« < 1 2 » »	
	Actions	Message	Read	Date		
Alerts (0) Messages: 5		Su declaración de impuestos ha	NO	03/05/2021		
incosuges. 5		We have received your Tax Retu	Ok	11/03/2021		
Notices (0) Messages: 0		We have received your Tax Retu	Ok	11/03/2021		
Incodyco. U		Su declaración de impuestos ha	Ok	22/02/2021		
Communications (0)		Su declaración de impuestos ha	Ok	15/02/2021		
Messages: 0		Reporte recibido satisfactoria	Ok	15/02/2021		

#### **3 Registry Update:**

Through the use of this feature, the taxpayer will be able to update their registry data throughout their life cycle.

#### UPDATE REGISTRATION







### **4 Two-step's authentication Security:**

This feature allows the taxpayer to enable double factor authentication to enhance the security of access to the system.

CONFIGURE AUTHENTICATOR APP

Download a two-factor authenticator app like Microsoft Authenticator for

1. Windows Phone, Android and Google Authenticator for Android and iOS.

2. Scan the QR Code or enter this key d3dv 7gfs 5zrv w343 t2jq hyrr nz3s owr3 into your two factor authenticator app. Spaces and casing do not

matter.	grs 5zrv w343 tzją nyrr nz3s owr3	into your two factor authenticator app	. spaces and casing do no
<ol> <li>Once you have scanned the QR code or input the confirmation box below.</li> </ol>	ut the key above, your two factor authent	ication app will provide you with a uniqu	e code. Enter the code in
Verification Code			
× CANCEL			<ul> <li>✓ VERIFY</li> </ul>

### 5 API KEYS:

The system has an API KEYS generator so that the taxpayer can carry out software developments tailored to their needs, allowing them to use the web services provided by the system to be able to file tax returns and complementary reports.

API KEYS		
Name	Expiration Date	
SAP_INTEGRATION	01/05/2021	
× CANCEL		✓ SAVE

#### **6** Payment consultation:

This feature allows the Taxpayer to consult all the payments made related to their tax obligations.

#### 7 Tax Account consultation:

This feature allows the Taxpayer to consult their checking account. It allows viewing the details of transactions associated with both tax returns and payments provided by the current account of the tax administration.





## 8 Credit from corrections:

This feature allows the taxpayer to consult the credits generated as a result of the presentation of corrective (corrective) returns that reduce the total tax to be paid and that are approved by an official of the tax administration.

#### **9** Submit Tax Return:

Through the use of this feature, the Taxpayer may submit their tax returns, in accordance with the tax vector associated with the taxpayer.



#### **10** Submit additional reports:

This feature allows the taxpayer to present complementary reports according to the vector of reports associated with the taxpayer.

### **11** Submit Corrective Declaration:

Through the use of this feature, the Taxpayer may present corrective (corrective) declarations. The corrective statements that reduce the tax caused will remain in a pending status to be reviewed by an official of the tax administration who will make the decision to approve or reject the statement.

#### **12 Consultation of Tax Returns:**

This feature will allow the Taxpayer to consult all the tax returns that have been submitted through DEC.

601 - Determined tax ()		602 - Previous credit 🕖	
	0.00		0.00
603 - Fines 🛈		604 - Tax interest 🗊	
	54.54		54.54
605 - Total to pay 🗊		606 - Amendment credit applied 🛈	
	109.08		0.00
607 - Credit due amendement ①		608 - Type of change ①	
	0.00		1.00
609 - Total local tax to pay 🛈		610 - Next credit 🗊	
	109.08		0.00





#### **13 Consultation of Complementary Reports:**

This feature will allow the taxpayer to consult all the complementary reports that he has submitted.

REPORT DETAILS	
Report number	Period
3-202101-WYOTQG	202101
Report Name	

Cell name	Туре	
		Description
ID_CUSTOMER	Text	Customer identification
CUSTOMER_NAME	Text	Customer name
SALE_AMOUNT	Currency	Total amount of the sale
TAX	Currency	VAT tax

#### **ADMINISTRATIVE PORTAL**

The Administrative portal is the system that allows the tax administration to manage all the actions necessary to facilitate the fulfillment of obligations by the taxpayer of the digital economy that carries out operations in its jurisdiction:

#### **1 Two-steps Authentication Security:**

This feature allows the taxpayer to enable double factor authentication to enhance the security of access to the system.

# **2** Users management:

The tax administration security officer who has access to this feature will be able to manage the users and permissions of all the tax administration officials.

EDIT USER	
Id ee44da3f-a6e3-4eca-bb93-ac470114e3de	User Name snoguez
Department	Email
	sebastian.noguez@ideati.net
Name	Disabled
Sebastian Noguez	
Preferred Language	
en-US	$\times$
ROLS	
Account Reports 🕡	





# **3** Taxpayers management

The official in charge of tax administration security with access to this feature may manage the taxpayer's users, in order to provide support for any problem related to access to the system.

Id	User Name
218da3b8-6d4a-4c37-9faf-ace701322999	RUC-210310-SH2CMH
Email	
sebastian.noguez@gmail.com	
Name	Disabled
Sebastian	
Preferred Language	
es-ES	$\times$
× CANCEL	✓ SAVE

#### **4** Consultation of Security, Application, and Audit events

The security official of the tax administration with access to this feature will be able to use the eight personalized logs where he can review all the events and actions carried out in the system, both at the security level, as well as at the application level, this being a fundamental tool to carry out any system audit.

Date From		Date To	
01/05/2021		03/06/2021	
User		Aggregate Name	
		EnvironmentVariable	$\times$
Event Name			
AuthenticatorEnabled	$\times$		
			↓ DOWNLOAD





## **5 Home Screen Configuration**

This feature allows the tax administration to customize the home page of the system, for each of the languages configured in it.

HOME TEMPLATE		
Preferred Language		
en-US	X	
1 - <div classname="row"> 2 - <div classname="col-12 col-md-6"></div></div>	DIGITAL ECONOMY COMPLIANCE	

2 -	
	<pre><div classname="col-12 col-md-6"></div></pre>
3 👻	<div></div>
4	<h1 classname="display-4 font-weight-bolder text-dark">D</h1>
5	
6 🔻	<div></div>
7 -	
8	This is the first Page of the <b>Digital Economy Com</b>
9	
10	The administrator can access and change the alerts a
11	that the Tax Autority requires to send to our client
12	Tax Payers, thanks for your register
13	
14	
15	
16	
17 -	<pre><div classname="col-12 col-md-6"></div></pre>
18 -	<pre><div classname="px-4 py-3"></div></pre>
19	<ing classname="img-fluid mx-auto mb-2" src="&lt;/th" width="500"></ing>
20	
21	
22	

× CANCEL

This is the first Page of the Digital Economy Compliance System

The administrator can access and change the alerts and informacions that the Tax Autority requires to send to our clients, Tax Payers, thanks for your register



✓ SAVE





#### **6** Security and Application Notification settings

these two functionalities allow the tax administration to customize the messages that are used by the system to send notifications to both the Taxpayer's electronic mailbox and their email. This feature allows the configuration of templates in each of the languages configured in the system.

UPDATE - APPLICATION NOTIFICATIONS		
Template id	Name	

 $\sim$ 

#### c9729519-b1bd-4390-95f4-7f7d3f94ebab

#### Email notification



#### Preferred Language

en-US X
<pre>1 <!DOCTYPE html 2 PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3 3 * <html xmlns="http://www.w3.org/1999/xhtml">     4</pre>
<pre>5 * <head> 6</head></pre>
<pre>10 @import url(http://fonts.googleapis.com/css?family=Lato:40 11 12  /* Take care of image borders and formatting */ 13 - img { 14  max-width: 600px; 15  outline: none; 16  text-decoration: none; 17  -ms-interpolation-mode: bicubic; 18  } 19</pre>
<pre>20 * a { 21     text-decoration: none; 22     border: 0; 23     outline: none; 24     color: #21BEB4; 25     } 26</pre>
27 - a img { 28 border: none; 29 }

#### tax-payer-enrollment





#### Inbox

Notifications





#### Hi {{ TaxpayerName }},

#### Your registration request has been received. If you have any issue, please contact support



#### 7 Configuration of security and application environment variables

These two functionalities allow the tax administration official to customize different system configuration variables, among which the data of the email server used to send notifications, the maximum amount number of failed login attempts allowed before locking the user or the total time associated with locking the user.

UPDATE - APPLICATION ENVIRONMENT	
Name	
smtp_server	
Туре	
Text	$\times$ $\sim$
Value	
smtp.office365.com	
× CANCEL	SAVE







## 8 Catalogs' configuration:

This feature is one of the most important in terms of the parameterization and customization of the system since through this the tax administration official will be able to define different catalogs (Example: list of countries, regions, periods, types of taxpayers, and others) that can also be used in custom forms for filing tax returns. It is important to note that all the elements of the catalogs have multi-language feature.

UPDATE - CATALOG TYPE

1a46a213-de12-4e95-a050-986e160653f2	
ame	
countries	
escription	
countries	
-US 🌐 1/4	

#### **9** Taxpayer Field settings:

This feature allows the tax administration official to configure the fields that need to be enabled for the taxpayer registration feature.

TAXPAYER FIELDS			

Contact ADDRESS	Contact CITY	Contact IDENTIFICATION	Contact IDENTIFICATION TAX NUMBER
Enabled	Enabled	Enabled	Enabled
Contact PHONE NUMBER Enabled	Contact POLITICAL DIVISION Enabled	Contact ZIP CODE Enabled	Documents CONTACT IDENTITY IN THE RESIDENCE COUNTRY Enabled
Documents LOCAL CONTACT REGISTERED IDENTITY Enabled	General Data ADDRESS Enabled	General Data CITY Enabled	General Data COMMERCIAL NAME Enabled





### **10 Operations settings (Economic Activity):**

This feature allows the tax administration official to manage the list of operations (or simplified economic activity) that taxpayers can carry out in the digital economy. These operations are very important, they are the ones that determine the taxpayer's tax obligations at the time of registration.

ECONOMY ACTIVITY	
Code	Name

🗵 CLEAR

+ NEW Q SEARCH

Actions	Code	Name	Description
Ø	001	Services broker	Services broker
Ø	002	Delivery of digital content	Delivery of digital content from downloads, streaming or other technologies.
Ø	003	Software or infrastructure services/ licensing	Software or infrastructure services/ licensing
Ø	004	Advertising	Advertising
Ø	005	Other activities	Other activities
Ø	006	IT services export	IT services export



This feature allows the tax administration official to manage the digital economy taxes or tax obligations that the system will process.

General Rates Periodicity	
Code	Short Name
101	VAT US en-US 🌐 2/4
Name	
Value Added Tax en-US 🌐 2/4	
× CANCEL <u> T</u> DELETE	✓ SAVE





## **12 Forms management:**

This feature allows the tax administration official to configure the system's forms, which are the instruments through which taxpayers present their tax returns. This, from the perspective of the tax administration, is one of the most important functionalities of the system. It allows setting the general characteristics; For example, the form name, the possibility of submitting corrective returns and if they need to be reviewed by the tax administrations or, on the contrary, if they are automatically accepted, the possibility of configuring the details of the forms at the level of each box, being able to establish data entry fields, fields that are pre-filled with taxpayer information or calculated fields that allow configuring both logical / arithmetic formulas and the result of consumption of integration web services that can be provided by the administration's Core Tax system.

Code Short name			
en-US 🌐 1/4		Version: 1 Since: 01/01/2019	¢
Name			
Value Added Tax			+ NEW VERSION
en-US 🌐 1/4 Tax			
Value Added Tax	$\times  $		
Number Modifications       Amendment Approval Required         4       4			

General data	Sections	Cells	Preview	Current Accou	Int Rules
Form code 100					Form name Value Added Tax
Version				1	
Start date					End date
01/01/2019 Enabled					
× CANCEL	<b>DELETE</b>				✓ SAVE







General data	Sections	Cells	Preview	Current Accour	nt Rules
Cell code					Cell name
				402	402 - Tax that is obtained by applying the rate on the tax base
					en-US 🌐 1/4
Description					
Tax that is obtain	ed by applying	the rate on	the tax base		
en-US 🌐 1/4					
Section					Туре

SALES DATA	$\sim$	Currency	× v
Service			
Service Parameters ⊕			
Order		Formula	
	402	C[401]*0.07	
Mandatory		Editable	
Visible		Taxreturn Total	
× CANCEL <u> OELETE</u>			✓ SAVE



Like the forms' management feature, this feature allows the tax administration official to configure the instruments that are used by the taxpayers to present the complementary reports that the tax administration deems necessary.

General Periodicity	
REPORT	VERSIONS
Code	Version: 1         \$
Short Name Sales report en-US  1/4	Version: 2  Since: 29/04/2021
Name Sales report	
en-US 🌐 1/4	+ NEW VERSION













Order: 1	Formula:
2 - PERIOD	
	S EDIT
Description: Customer billing period (YYYY-MM-DD)	Type: Date
Order: 2	Formula:
3 - AMOUNT_BILLED	
	6 EDIT
Description: Customer invoice amount	Type: Currency
Order: 3	Formula:

#### **14 Operations management - taxes:**

his feature allows establishing the links between operations and taxes. These relationships are used by the system to determine the tax vector of the taxpayer at the time of registration or updating of their registry data.

MANAGE 1	TAX OPERATIONS		
Tax		Operation	
✓ CLEAR			+ NEW Q SEARCH
Actions	Operation	Тах	
Ū	Services broker	Value Added Tax	
Ū	Software or infrastructure services/ licensing	Value Added Tax	
Ū	IT services export	Value Added Tax	
Ū	Advertising	Income tax	
亩	Delivery of digital content	Income tax	







#### **15 Operations Management- Reports:**

This feature allows to establish the links between operations and complementary reports. These relationships are used by the system to determine the taxpayer's reporting vector at the time of registration or updating of their data.

MANAGE REPORT OPERATIONS	
Report	Operation

			+ NEW	Q SEARCH
Actions	Operation	Report		
Ū	Software or infrastructure services/ licensing	Sales report with foreign cards		
Ū	Advertising	Sales report		
Ū	Delivery of digital content	Sales report with foreign cards		

#### **16 Review of Taxpayers' Requests:**

The tax administration official with access to this feature will be able to review the registration requests of new taxpayers, as well as the requests to update the data of existing taxpayers. This feature allows approving, rejecting or requesting additional information from the taxpayer.

General	Тах	Contacts	Operations	Tax vector	Report	Documents
Identifier of t	he comp	any registration	document			
DOWNLOA	D FILE	numbers.pdf				
Contact ident	tity in the	e residence coun	try			
DOWNLOA	D FILE	numbers.pdf				
Local contact	t register	ed identity				
DOWNLOA	D FILE	numbers.pdf				
·						
× CANCEL					T REJEC	CT Q REQUEST ADDITIONAL INFORMATION





### **17 Taxpayers Consultation:**

The tax administration official with access to this feature may consult the taxpayer's data in the system.

TAXPAYER REPORT	
Nit	Name
Country	Person type

⊗ CLEAR				Q	SEARCI
Actions	Nit	Name	Person type	Email	
Q	RUC-201023-VQ0ABE	Ctbte #3 Español	INDIVIDUALS	rolando.delacruz@ideati.net	
Q	RUC-201023-9OFNVW	Ctbte Nat #4	INDIVIDUALS	ROLANDO.DELACRUZ@IDEATI.NET	
Q	RUC-201023-8EL4RM	Ctbte # 5 Nat Español	INDIVIDUALS	rolando.delacruz@ideati.net	
Q	RUC-201023-CE9SDO	Marcos Prins	INDIVIDUALS	marcosprins@gmail.com	

#### **18 Payment Consultation:**

The tax administration official with access to this feature may consult the payments of any taxpayer in the system. This feature is important for tax administration officials who work performing help desk functions for the taxpayers.



#### **19** Checking Account consultation:

This feature allows the tax administration official to check the checking account of any Taxpayer registered in the system and consequently their payments. This feature is very important for tax administration officials who work performing help desk functions for Taxpayers.



#### **20 Rectification Credit:**

This feature allows the tax administration official to consult the credits generated by any taxpayer registered in the system. This functionality is very important for tax administration officials who work performing help desk functions for Taxpayers.







#### 21 Revision of Corrective tax returns:

This feature allows the tax administration official to carry out revision tasks of the corrective statements that have been entered into the system. It is important to note that only the corrective declarations of the tax forms that have been configured with the option **"Rectifications Requiring Review"** will be listed. The official with access to this functionality may approve or reject the rectifying statement, and in the event of rejection, they must indicate to the taxpayer the reason why their correction has been rejected.

#### DETERMINATION OF TAX AND TOTAL TO PAY

601 - Determined tax 🛈		602 - Previous credit 🛈
	0.42	0.00
603 - Fines 🛈		604 - Tax interest 🛈
	54.54	54.54
605 - Total to pay 🛈		606 - Amendment credit applied 🗊
	109.50	0.00
607 - Credit due amendement 🛈		608 - Type of change ①
	1,399,999,929.58	1.00
609 - Total local tax to pay 🛈		610 - Next credit 🛈
	109.50	0.00
× CANCEL		🛅 REJECT 🧹 APPROV

	Α	
omments	Approve	
DETERMINATION OF TAX AND TOTAL TO PAY		
omments	Approve	
eneral Comments		









### 22 Reports, Declarations Consultation:

This feature allows the tax administration official to consult all the tax returns that have been entered into the system, as well as filtering by multiple criteria.

TAXRETURN REPORTS		
Form	Period (i)	
Country	Operation Type	

Nit	Taxreturn Number
Period From	Period To
Active	Status
CLEAR	Q SEARCH

QRUC-201109-9BNRM2Ctbte#21USNat101-201910-WPPZXT19/11/2020OriginalAccepted10QRUC-201109-9BNRM2Ctbte#21USNat101-202001-WNKZXG19/11/2020OriginalAccepted10QRUC-201109-9BNRM2Ctbte#21USNat101-202001-WNNIXG19/11/2020OriginalAccepted10QRUC-201109-9BNRM2Ctbte#21USNat101-201912-WPPTBG19/11/2020OriginalAccepted10QRUC-201109-9BNRM2Ctbte#21USNat101-200001-WDPFXG19/11/2020OriginalAccepted10QRUC-201109-9BNRM2Ctbte#21USNat101-200001-WDPFXG19/11/2020OriginalAccepted10QRUC-201109-9BNRM2Ctbte#21USNat101-202001-RWPZXG20/11/2020OriginalAccepted10QRUC-201030-GHF8IZCtbte 9 Nat US101-202001-RWPZXG20/11/2020OriginalAccepted10QRUC-201112-DYKG9KCtbte#22NatESP101-201912-QWPZXG20/11/2020OriginalAccepted10QRUC-201112-DYKG9KCtbte#22NatESP101-201912-QWPZXG23/11/2020OriginalAccepted10QRUC-201112-DYKG9KCtbte#22NatESP101-201912-EREPZXG23/11/2020OriginalAccepted10	Actions	Nit	Taxpayer Name	Taxreturn Number	Create Date	Operation Type	Status	For
QRUC-201109-9BNRM2Ctbte#21USNat101-202001-WNKZXG19/11/2020OriginalAccepted10QRUC-201109-9BNRM2Ctbte#21USNat101-202001-WNNJXG19/11/2020OriginalAccepted10QRUC-201109-9BNRM2Ctbte#21USNat101-201912-WPPTBG19/11/2020OriginalAccepted10QRUC-201109-9BNRM2Ctbte#21USNat101-200001-WDPFXG19/11/2020OriginalAccepted10QRUC-201109-9BNRM2Ctbte#21USNat101-200001-WDPFXG19/11/2020OriginalAccepted10QRUC-201030-GHF8IZCtbte 9 Nat US101-202001-RWPZXG20/11/2020OriginalAccepted20QRUC-201112-DYKG9KCtbte#22NatESP101-201912-QWPZXG20/11/2020OriginalAccepted10QRUC-201112-DYKG9KCtbte#22NatESP101-201912-EREPZXG23/11/2020OriginalAccepted10	Q	RUC-201030-GHF8IZ	Ctbte 9 Nat US	101-202010-WPPZFG	19/11/2020	Original	Accepted	20(
QRUC-201109-9BNRM2Ctbte#21USNat101-202001-WNNJXG19/11/2020OriginalAccepted10QRUC-201109-9BNRM2Ctbte#21USNat101-201912-WPPTBG19/11/2020OriginalAccepted10QRUC-201109-9BNRM2Ctbte#21USNat101-200001-WDPFXG19/11/2020OriginalAccepted10QRUC-201030-GHF8IZCtbte#21USNat101-202001-RWPZXG20/11/2020OriginalAccepted20QRUC-201112-DYKG9KCtbte#22NatESP101-201912-QWPZXG20/11/2020OriginalAccepted10QRUC-201112-DYKG9KCtbte#22NatESP101-201912-EREPZXG23/11/2020OriginalAccepted10	Q	RUC-201109-9BNRM2	Ctbte#21USNat	101-201910-WPPZXT	19/11/2020	Original	Accepted	10
QRUC-201109-9BNRM2Ctbte#21USNat101-201912-WPPTBG19/11/2020OriginalAccepted10QRUC-201109-9BNRM2Ctbte#21USNat101-200001-WDPFXG19/11/2020OriginalAccepted10QRUC-201030-GHF8IZCtbte 9 Nat US101-202001-RWPZXG20/11/2020OriginalAccepted20QRUC-201112-DYKG9KCtbte#22NatESP101-201912-QWPZXG20/11/2020OriginalAccepted10QRUC-201112-DYKG9KCtbte#22NatESP101-201912-REPZXG23/11/2020OriginalAccepted10	Q	RUC-201109-9BNRM2	Ctbte#21USNat	101-202001-WNKZXG	19/11/2020	Original	Accepted	10
QRUC-201109-9BNRM2Ctbte#21USNat101-200001-WDPFXG19/11/2020OriginalAccepted10QRUC-201030-GHF8IZCtbte 9 Nat US101-202001-RWPZXG20/11/2020OriginalAccepted20QRUC-201112-DYKG9KCtbte#22NatESP101-201912-QWPZXG20/11/2020OriginalAccepted10QRUC-201112-DYKG9KCtbte#22NatESP101-201912-EREPZXG23/11/2020OriginalAccepted10	Q	RUC-201109-9BNRM2	Ctbte#21USNat	101-202001-WNNJXG	19/11/2020	Original	Accepted	10
QRUC-201030-GHF8IZCtbte 9 Nat US101-202001-RWPZXG20/11/2020OriginalAccepted20QRUC-201112-DYKG9KCtbte#22NatESP101-201912-QWPZXG20/11/2020OriginalAccepted10QRUC-201112-DYKG9KCtbte#22NatESP101-201912-EREPZXG23/11/2020OriginalAccepted10	Q	RUC-201109-9BNRM2	Ctbte#21USNat	101-201912-WPPTBG	19/11/2020	Original	Accepted	10
QRUC-201112-DYKG9KCtbte#22NatESP101-201912-QWPZXG20/11/2020OriginalAccepted10QRUC-201112-DYKG9KCtbte#22NatESP101-201912-EREPZXG23/11/2020OriginalAccepted10	Q	RUC-201109-9BNRM2	Ctbte#21USNat	101-200001-WDPFXG	19/11/2020	Original	Accepted	10
Q RUC-201112-DYKG9K Ctbte#22NatESP 101-201912-EREPZXG 23/11/2020 Original Accepted 10	Q	RUC-201030-GHF8IZ	Ctbte 9 Nat US	101-202001-RWPZXG	20/11/2020	Original	Accepted	20
	Q	RUC-201112-DYKG9K	Ctbte#22NatESP	101-201912-QWPZXG	20/11/2020	Original	Accepted	10
Q RUC-201112-DYKG9K Ctbte#22NatESP 101-201911-NOSREW 23/11/2020 Original Accepted 10	Q	RUC-201112-DYKG9K	Ctbte#22NatESP	101-201912-EREPZXG	23/11/2020	Original	Accepted	10
	Q	RUC-201112-DYKG9K	Ctbte#22NatESP	101-201911-NOSREW	23/11/2020	Original	Accepted	10





#### **23** Reports, Consultation of Complementary Reports:

This feature allows the tax administration official to consult any complimentary report that has been presented by the taxpayer. Through this functionality, it is possible to filter by multiple criteria.

REPORT DETAILS	
Report type	Period (i)

Country	Operation Type
Nit	Report number
Period From	Period To
Tax payer Name	
✓ CLEAR	୍ C SEARCH

Actions	Report number	Tax payer number	Tax payer Name	Туре	State	Active	Ragistration Date
Q	3-201903-VFDHOZ	RUC-201112-DYKG9K	Ctbte#22NatESP	original	error	No	01/12/2020
Q	3-202002-8RUFCR	RUC-201112-DYKG9K	Ctbte#22NatESP	original	error	No	03/12/2020

Q	3-202001-YBODQQ	RUC-201112-DYKG9K	Ctbte#22NatESP	original	error	No	03/12/2020
Q	1-201901-F29DMV	RUC-201203-XLEAKK	SubsSmart	original	error	No	03/12/2020
Q	3-201901-T9ZRTL	RUC-201203-XLEAKK	SubsSmart	original	error	No	03/12/2020
Q	3-202001-6GTWNI	RUC-201203-XLEAKK	SubsSmart	original	error	No	03/12/2020
Q	3-202002-53AVKZ	RUC-201203-XLEAKK	SubsSmart	original	processed	No	03/12/2020
Q	3-202003-OQZOND	RUC-201203-XLEAKK	SubsSmart	original	processed	No	03/12/2020
Q	3-202004-2G1SLM	RUC-201203-XLEAKK	SubsSmart	original	error	No	03/12/2020
Q	3-201903-KIPS3B	RUC-201112-DYKG9K	Ctbte#22NatESP	original	accepted	No	09/12/2020
							• •
Showing 1 to 15	of 85 entries				« < 1	2 3 4	5 6 .







## 24 Taxpayer Management Reports:

This feature allows the tax administration official to view in a dashboard the consolidated information on the Taxpayers registered in the system.









### **25 Managerial Reports of Declarations:**

This feature allows the tax administration official to view in a dashboard consolidated information on the Tax Returns submitted by Taxpayers.

TAXRETURN				
By country	By operation	Amount by tax		
Date From			Date To	



1,000,000,000								
0—	November 2020	December 2020	January 2021	February 2021	March 2021	April 2021	May 2021	June 2021



# SETUP FEATURES

DEC was conceived on the basis that it could be easily implemented in any tax administration that had the challenge of managing taxes in the digital economy.

#### Under this premise, the system has the following characteristics:



Parameterization in all the modules and functionalities of the system, including the parameterization of templates for all notifications made by the system and configuration of personalized catalogs.



Configuration of electronic forms for filing the tax returns.



It enables integration with the tax management system of the Tax Administration. In this sense, the DEC provides integration mechanisms with the main modules of the tax core, highlighting the taxpayer module and the tax account module.



# Multi-language configuration of the system (currently available in Spanish and English).



Graphic design adaptable to the needs of the tax administration. Allows to customize name, logos and institutional colors.





# TECHNICAL FEATURES



The DEC system is made up of the following components:



### WEB SERVERS:

# Authentication portal:

Web server used to capture the user's credentials.

#### **Taxpayer Portal:**

Web server that allows access to the functionalities available to the taxpayers.

#### **Administrative Portal:**

Web server that allows access to the functionalities available to Tax Administration officials.



## **API SERVERS**

#### **Security Backend:**

API server that implements authentication and authorization services. **Application Backend:** 

API server that implements the services of the functionalities used by taxpayers and Tax Administration officials.



#### DATABASES

#### Safety database:

In charge of managing user and role information. **Database:** 

Database in charge of storing the data and transactions associated with the DEC system.

In the following conceptual architecture diagram, we can see how these components interact.



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The DEC system architecture has the following advantages:

It can be implemented in any of the following options:

#### Microsoft Azure Λ









#### Regarding the system database repositories, you can use:









#### **TEST ENVIRONMENT INSTALLATION REQUIREMENTS**







#### BACKEND

- It must have a connection to the database associated with the environment (development, tests).
- At least 10gb of memory.
- 30GB of disk space available for the system.



#### FRONTEND

- At least 8GB of memory.
- 30GB of disk space available for the system.



### **INTEGRATION API**

- At least 8GB of memory.
- 30GB of disk space available for the system.



- 1 database schema for DEC.
- 1 database schema for DEC-SECURITY.
- The user accessing the databases must have DDL permissions on those schemas (The system will create tables when starting for the first time).





# SECURITY AND AUDIT



Regarding the security of the system, access to the DEC is done through username and password, where additionally every user of the system, taxpayer, or administrator can enable the two-steps authentication (2FA) feature.



When implementing the DEC in the Tax Administration, it is possible to configure the integration with the security services that its authentication scheme uses.

#### **AUDIT RECORDS**



The system includes the audit feature, which is composed of records of events, accesses, and operations that allow identifying any action that occurs therein.



# USER EXPERIENCE

The behavior and graphic design of DEC were carried out considering the main guidelines and good practices for the user's experience, made up by a set of factors and elements related to the user interaction, which may result in a positive or negative perception of said product.







Another feature of DEC is that it can be used in dark mode, in those internet browsers that implement this feature.

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	FORMS					VERSIONS			
	Code		Short name			Version: 1		¢	
	2	11	IVA			Since: 21/05/2	021		
			en-US 🌐 0/1						
	Name							(FROID)	
	IVA						+ NEW \	VERSION	
	en-US 🌐 0/1								
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	Number Modifications		Amendment Approval Require	d					





# MAINTENANCE





The DEC implementation project includes the transfer of the system's source code only to Tax Administrations, without charges associated with this transfer.





Once the DEC tool is installed, the Tax Administration will have total control over the corrective and evolutionary maintenance of the system.

The beneficiaries of the DEC system will be able to incorporate future updates developed by the CIAT team with the purpose of optimizing existing functionalities or creating new ones.







# DEC IMPLEMENTATION



CIAT has a dedicated multidisciplinary implementation team, which works hand in hand with the counterpart team established by the TA.

It is important that the TA define a counterpart team, which must contain at least the following key profiles:



### **PROJECT MANAGER**

In charge of leading the DEC implementation project



#### **DEVELOPMENT TEAM**

Personnel from the TA development team, who will participate in the configuration and integration activities of the TA Core with the DEC.



#### **FUNCTIONAL TEAM**

Personnel in charge of the definition of tax forms



#### **QUALITY ASSURANCE TEAM**

Personnel in charge of approving the system prior to deployment in production.

#### LEGAL TEAM

In charge of defining the terms, conditions and policies of use of the system.





**DEC IMPLEMENTATION PLAN** 

CIAT has prepared a basic DEC implementation plan that has a 12-week extension. This plan has four phases.

1 Project initiation and presentation phase.

2 Survey phase to detect the specific needs of the TA where characteristics of the Core system and the forms of integration it provides are reviewed. In this phase the scope will be established in terms of integration with the Taxpayer registry of the Core system, as well as the integration of the Taxpayers current account.

- 3 Implementation phase, which is the most extensive of the project, where the DEC configurations and parameterizations are carried out, as well as the integrations with the CORE system.
- 4 Finally, there are two weeks for the approval and deployment of the DEC system in the production environment.

	Month 1			Month 2			Month 3					
	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
PHASE 1: KickOff												
PHASE 2: Analysis												
<b>PHASE 3: Implementation</b>												
PHASE 4: Deploy												







# Digital Economy Compliance

Developed by CIAT / NORAD

