

48th CIAT GENERAL ASSEMBLY



“THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE TAX ADMINISTRATION”

Rio de Janeiro, Brazil, May 5 - 8, 2014





**Inter-American Center of Tax Administrations - CIAT
Federal Revenues of Brazil - RFB**

48TH CIAT GENERAL ASSEMBLY



**THE USE OF INFORMATION AND COMMUNICATION
TECHNOLOGIES IN THE TAX ADMINISTRATION**

**Rio de Janeiro, Brazil
May 5 - 8, 2014**



Copyright ©2014
Inter-American Center of Tax Administrations - CIAT
Executive Secretariat

P.O. Box 0834-02129
Panama, Republic of Panama
Web site: <http://www.ciat.org>
E - mail: ciat@ciat.org

ISBN 978-9962-647-80-5

Published by Inter-American Center of Tax Administrations - CIAT

INDEX

Presentation on CIAT
Inaugural Ceremony

TOPIC 1 THE USE OF ELECTRONIC DOCUMENTS IN TAX ADMINISTRATION

Lecture

Topic 1 **THE BRAZILIAN EXPERIENCE IN ELECTRONIC
DOCUMENTATION**, Carlos Barreto, Secretary
of the Federal Revenue, Carlos Roberto Occaso,
Undersecretary of Revenue and Assistance,
Receita Federal (Brazil)..... 3

Case Study

Topic 1.1 **ELECTRONIC DOCUMENTS. SOLUTIONS
FOR SMALL AND MEDIUM ENTERPRISES -
EXPERIENCE OF CHILE**, Michel Jorratt, Director,
Internal Revenue Service (Chile)..... 19

Topic 1.1 **COOPERATION WITH THE PRIVATE SECTOR
FOR THE USE OF ELECTRONIC INVOICES
IN RETAIL SALES - CASE OF MEXICO**, Adrian
Guarneros, Panning General Administrator, Tax
Administration Service, (Mexico)..... 39

Topic 1.1 **PREPAID PHONE CREDITS AS A MEANS OF
PAYMENT**, Ezekiel Saina, Deputy Commissioner,
Revenue Authority (Kenya)..... 47

Topic 1.2 **TOWARDS A 100% DIGITAL NETHERLANDS
TAX AND CUSTOMS ADMINISTRATION**, Peter
Veld, Commissioner, The Tax and Customs
Administration (The Netherlands)..... 61

Topic 1.2	OTHER INNOVATIONS IN THE USE OF ELECTRONIC SYSTEMS “MY CONTRIBUTIONS” SYSTEM , Angel Ruben Toninelli, General Director, Federal Administration of Public Revenues (Argentina).....	81
-----------	---	----

TOPIC 2 INFORMATION AND COMMUNICATION TECHNOLOGIES FOR PROVIDING TAXPAYER SERVICES

Lecture

Topic 2	INFORMATION AND COMMUNICATION TECHNOLOGIES AT THE SERVICE OF THE TAXPAYER , Santiago Menéndez Menéndez, General Director, State Agency of Tax Administration (Spain).....	87
---------	--	----

Case Study

Topic 2.1	INNOVATIONS IN TAX ADMINISTRATION UTILIZING MOBILE PLATFORM , Pablo Ferreri, General Director of Revenue (Uruguay).....	111
-----------	--	-----

Topic 2.1	THE USE OF TECHNOLOGY IN EXEMPT SERVICES FOR DIPLOMATS , Carlos Muñoz, Superintendent, Superintendency of Tax Administration (Guatemala).....	127
-----------	--	-----

Topic 2.1	CONTAC CENTER SUNAT: IMPROVING THE RELATIONSHIP WITH CITIZENS/TAXPAYERS , Tania Quispe, National Tax Superintendent, National Superintendency of Customs and Tax Administration (Peru).....	139
-----------	--	-----

Topic 2.2	TAXPAYER ASSISTANCE CHANNELS AND PLATFORMS “EXPERIENCE OF PORTUGAL , Jose Antonio de Azevedo Pereira, General Director, General Directorate of Taxes (Portugal).....	147
-----------	---	-----

INDEX

Topic 2.2	TAXPAYER ASSISTANCE CHANNELS AND PLATFORMS - EXPERIENCE OF SOUTH AFRICA , Hope Tau Mashigo, Chief Information Officer, Revenue Services (South Africa)	157
Topic 2.2	TAXPAYER ASSISTANCE CHANNELS AND PLATFORMS - EXPERIENCE OF PEOPLE'S REPUBLIC OF CHINA , Lan Song, Deputy Commissioner, State Administration of Taxation, (People's Republic of China)	171
Topic 2.3	ELECTRONIC FILING OF PAY-AS-YOU-EARN (PAYE) , Wayne Forde, Director of Shared Services, Revenue Authority (Barbados)	177
TOPIC 3	INFORMATION AND COMMUNICATION TECHNOLOGIES AND TAX CONTROL	
<i>Lecture</i>		
Topic 3	THE USE OF "BUSINESS INTELLIGENCE" FOR TAX CONTROL PURPOSES , Brian McCauley, Assistant Commissioner, Revenue Agency (Canada).....	185
<i>Case Study</i>		
Topic 3.1	DATA MINING AND OTHER APPLICATIONS IN FINANCIAL AND TAX CRIME INVESTIGATIONS: EXPERIENCE OF ITALY , Giampiero Ianni, Head of International Cooperation Office, Guardia di Finanzas (Italy).....	199
Topic 3.1	DATA MINING AND OTHER APPLICATIONS IN FINANCIAL AND TAX CRIME INVESTIGATIONS: EXPERIENCE OF INDIA , R.K. Tewari, Chairman of the Central Board of Direct Taxes, Revenue Department (India).....	209

INDEX

Topic 3.2	THE BIOMETRIC REGISTRY CHALLENGES AND OPPORTUNITIES , Erick Ariñez Bazzan, Executive Chairman (a.i), National Tax Service (Bolivia).....	223
Topic 3.2	IDENTITY THEFT: CHALLENGES AND OPPORTUNITIES , Douglas O'Donnell, Assistant Deputy (International) Commissioner, Internal Revenue Service (USA)	237
	PRESENTATIONS AND VIDEOS OF THE 48TH CIAT GENERAL ASSEMBLY	261
	CLOSING SESSION	
	Daily Schedule of Activities.....	265
	List of participants	275

ABOUT CIAT

ABOUT CIAT

CIAT is a public, nonprofit international organization established in 1967, with the mission of providing an integral service for the modernization, strengthening and technical development of the Tax Administrations of its member countries. Its membership currently consists of 38 member and associate member countries from four continents: 31 countries from the Americas, five from Europe, and one from Africa and one from Asia. India is an associate member country.

The Web site: www.ciat.org includes information of a technical and institutional nature, as well as on the various activities carried out such as international meetings, tax studies, publications, training, technical assistance and information technology.

Member Countries

Argentina	Dominican Republic	The Netherlands
Aruba	Ecuador	Nicaragua
Barbados	El Salvador	Panama
Bermuda	France	Paraguay
Bolivarian Republic of Venezuela	Guatemala	Peru
Bolivia	Guyana	Portugal
Brazil	Haiti	Sint Maarten
Canada	Honduras	Spain
Chile	India	Suriname
Colombia	Italy	Trinidad & Tobago
Costa Rica	Jamaica	Uruguay
Cuba	Kenya	United States of America
Curacao	Mexico	

EXECUTIVE COUNCIL 2013- 2014

President

Ricardo Echegaray Argentina

Councilors:

Carlos Alberto Barreto	Brazil
Brian McCauley	Canada
Michel Jorratt de Luis	Chile
Yolanda Álvarez de Torre	Cuba
Carlos Alfredo Cativo Sandoval	El Salvador
Peter Veld	The Netherlands
Tania Quispe	Peru
Pablo Ferrer	Uruguay

EXECUTIVE SECRETARIAT

Executive Secretary	Márcio F. Verdi
Institutional Planning and Development Director	Socorro Velázquez
Training and Human Talent Development Director	María Raquel Ayala
Operations and Institutional Management Director	Francisco J. Beiner
Technical Assistance and Information Technology and Communication Director	Raúl Zambrano V.
Tax Studies and Research Director	Miguel Pecho
International Cooperation and Taxation Director	Gonzalo Arias
Accounting and Finance Manager	Xiomara Tejada
Internal Administration and Human Resources Manager	Rita L. Solis

REPRESENTATIVES AND CORRESPONDENTS OF CIAT

Country	Representative	Correspondent
Argentina	Ricardo Echegaray	Lina Silvana Anllo
Aruba	Ritza Hernandez	Anita ten Hove
Barbados	Margaret Silvers	
Bermuda	Lucia M. Peniston	
Bolivia	Erick Ariñez Bazzan	Juana Patricia Jiménez
Brazil	Carlos Alberto Barreto	Flavio Araujo
Canada	Brian McCauley	María Pica
Chile	Michel Jorrat de Luis	Bernardita Moraga
Colombia	Juan Ricardo Ortega	Ruben Dario Pineda
Costa Rica	Carlos Vargas Durán	Maribel Zúñiga C.
Cuba	Yolanda Alvarez de la Torre	Armando Lopetegui M.
Curazao	Jamila Isenia	Yut-Ha Natalie Sint Hill
Dominican Republic	Guarocuya Félix	Nieves Vargas Collado
Ecuador	Ximena V. Amoroso Iñiguez	Mauro Andino A.
El Salvador	Carlos Alfredo Cativo Sandoval.	Ramón Pérez Gómez
France	Bruno Bezar	Josiane Lanteri
Guatemala	Carlos Muñoz	Mario R. Riveiro Franco
Guyana	Khurshid Sattaur	Janet Abbensetts
Haiti	Clarck Neptune	
Honduras	Miriam Guzman	Grace de La Paz Saravia
India	Rajat Bansal	Deepak Garg
Italy	Saverio Capolupo	Stefano Gesuelli
Jamaica	Ainley Powell	Meris Haughton
Kenya	John Karimi Njiraini	Pancrasius Nyaga

Mexico	Aristoteles Nuñez	Adrian Guarneros
Nicaragua	Martin Rivas Ruíz	
Panamá	Luis Cucalón	
Paraguay	Marta González Ayala	Alba Servin
Peru	Tania Quispe	Clara Rossana Urteaga
Portugal	José Antonio de Azevedo P.	Miguel Silva Pinto
Sint Maarten	María Bass	Janio Chayadi
Spain	Santiago Menéndez Menéndez	Ignacio Del Rio Angulo
Surinam	Cornelis A. van Dijk	Merkus Eugene
The Netherlands	Peter Veld	Marian Bette
Trinidad & Tobago	Allison Raphael	Trevor Lalai
United States	John M. Dalrymple	Raúl Pertierra
Uruguay	Pablo Ferreri	Margarita Faral
Venezuela (Bolivarian Rep.)	José David Cabello Rondón	Pablo Pinto Chávez

TECHNICAL ASSISTANCE MISSIONS

Spain

Head of Mission: Luis Cremades Ugarte

France

Head of Mission: Isabelle Gaetan

Italy

Head of Mission: Stefano Gesuelli

Germany

Head of Mission: Joerg Wisner

OFFICIAL PHOTOGRAPH



TOPIC 1

**THE USE OF ELECTRONIC DOCUMENTS IN TAX
ADMINISTRATION**

Lecture

Topic 1

THE BRAZILIAN EXPERIENCE IN ELECTRONIC DOCUMENTATION

Carlos Barreto

Secretary of the Federal Revenue

Carlos Roberto Occaso

Undersecretary of Revenue and Assistance

Receita Federal

(Brazil)

Contents: Introduction. 1. Background on the initiative. 2. Description of the Initiative. 3. Target audience. 4. Difficulties found. 5. Results. 6. Technological Architecture. 7. Relevant Information. 8. Project Team.

INTRODUCTION

Brazilian Tax Administrations, following the example of many other countries, set themselves apart by their ongoing modernization effort. In this context, fiscal cooperation has been the key element to build a network capable of making the changes that occur with the use of cutting edge information technology as a way to expand fiscal controls while reducing costs in the fulfillment of obligations by taxpayers, mainly those accessory.

Tax cooperation has therefore been the reason for having so quickly introduced electronic tax documents in our country, as a result of agreements and understandings between the States and the Federal Government, through their respective Ministries of Finance and the Brazilian Federal Revenue Agency, despite the complexity of Brazilian tax legislation.

The Consumer Electronic Invoice - NFC-e therefore represents a natural evolution of the processes of electronic tax documents in Brazil starting from the Electronic Invoice, the latter used in transactions between businesses, as we will detail in this text.

For reasons of historical evolution of the State Tax Administration, the retail sector is probably the sector of the economy that has, today, the

largest amount of tax controls and accessory tax obligations. Retail companies who bill more than R \$ 120,000 per year, which is not much, or even small companies are required to issue paper tax documents called tax receipt using a specific piece of equipment known as ECF – Tax Receipt Issuer.

A fiscal printer or ECF today costs at least 1,500 Reales. Besides the high cost of this equipment, there is a tax bureaucracy created supposedly to ensure fiscal control. First, the ECF should be from a manufacturer, make and model approved by the Treasury.

For this ECF equipment to be authorized, the manufacturer must demonstrate not only that the equipment meets all technical requirements specified in the National Standard (ICMS Convention approved by the National Council on Economic Policy - CONFAZ), but also the software running on the equipment. To that end, the manufacturer must standardize the ECF model and ECF software before the technical institutes accredited by the tax authorities, bearing the cost of this approval, which can take several months.

After the acquisition of the ECF, the business must register the equipment with the Treasury, and then the equipment shall receive controlled stamps and which are also affixed by companies authorized by the Treasury, called technical auditors. When the technical auditor seals the ECF or performs any type of maintenance on the equipment, he/she must issue a paper document known as a certificate of intervention, which must be kept by the business for a limitation period for submission to the Treasury which is 5 years.

Now that the business already has an ECF accredited by the Treasury and sealed, it can start using the equipment to issue its tax stamp on every sale. When opening the cash register daily, the business should do an X reading in each ECF, which is a computer printout summarizing the status of the fiscal memory. This X reading should be done even for ECFs not in use that day.

Upon closing the cash register, or upon completion of 24 hours of operation of the ECF, the business should do for each ECF, a Z reduction which is a print summary of daily transactions of the tax position. These two documents on paper (X reading and Z Reduction) issued daily by each ECF should also be kept for 5 years by the business for presentation to the State Treasury.

If the business has more than 3 ECFs, it must also issue another paper document called Cash Register Summary Map, which transcribes the daily sales summaries for each ECF.

In the event that the business wants to open more cash registers to meet a temporary increase in demand from customers, for example, during holidays (Christmas, Mother's Day, etc.), it must purchase and register the ECFs for use only in those days.

If the ECF tax memory reaches its transaction record maximum limit, it must be replaced by a new memory and the previous one shall be saved during five years.

If the business does a modernization of their ECFs with new equipment, you need to save one of the old pieces of ECF equipment for at least 5 years to allow reading of tax memories.

The fiscal printer or ECF has other controls required by the Treasury, such as simultaneous printout, which means that each product recorded as a sale should have its information description printed on the tax receipt when rung through the cash register. Another feature is that a tax receipt can only be canceled immediately after the sale, that is, if another tax receipt has not yet been issued by the same piece of equipment.

All printing of tax receipt is regulated requiring a printout detailing every product sold, including product description, code, quantity, unit price and taxes paid. For example, a purchase of groceries consisting of many items (which is quite common) ends up creating a long tax receipt, with high paper cost and that the customer ultimately dumps in the waste basket.

The tax receipt is not good for product warranty purposes either. Thus, the consumer who buys a refrigerator, for example, besides the receipt must request when being waited on the issuance of another document, an invoice for warranty purposes. In addition to the costs incurred by the business issuing tax documents in the sale itself, this represents additional time spent by consumers.

Thermal paper on which tax receipts are printed is expensive because it requires the Treasury to ensure the information can be read for up to five years.

The ECF equipment became a treasure trove of tax information for the taxpayer's business. But not content with including many additional obligations related to the ECF, the State Tax Administrations also evolved into controlling the software of cash registers, technical requirements that must meet the PAF - ECF Tax Implementation Program standards. Therefore, companies providing commercial automated solutions must also validate their cash register software before the Technical Institutes accredited by the State Treasury.

For small businesses with revenues of less than 120 thousand reais a year, and which are therefore not bound by the tax law to have an ECF, they also have an expensive secondary obligation which is to obtain authorization to print and procure model 2 manual invoice stubs. Such invoices shall be issued manually, in duplicate, on paper with carbon copy and the stub duplicate must be kept by the commercial establishment for possible tax filing for 5 years.

However, all this tax bureaucracy involving the Treasury requirement that retailers have tax equipment (ECF) and a number of related accessory tax obligations, could be justified if the efficiency and effectiveness of fiscal supervision over taxes and greater tax justice were guaranteed, along with better security for the consumer that the taxes they are paying for the price of the goods purchased become taxes reaching the National Treasury, ultimately resulting in bigger and better public services for taxpayers or for society.

However, these two goals are in fact not being fully fulfilled because of the tax bureaucracy involving the ECF. On the side of the State Treasury, in order for ECF tax controls to be effective, it would be necessary to have tax verification capacity in commercial establishments to ensure that ECF equipment were not tampered with and the seals were not broken, and that equipment do not suffer modifications in their tax software or tax information recorded in the fiscal memory of the ECF. However, given the vast number of retailer taxpayers, it is impossible for a tax auditor to inspect every commercial establishment and each ECF.

On the consumer side, there is no guarantee with the ECF that the sale information is indeed known by the Treasury. Furthermore, there is no guarantee that the customer will receive a tax receipt issued by the ECF. Therefore, the ECF often ends up creating a false sense of fiscal control for both the Treasury and the consumer, making it difficult to detect fraud. An example of this would be tampering with ECF software, which records only a part of sales in the fiscal memory or simply allows no tax stamps to be recorded in the memory.

Even if it were possible to have a more active on-site oversight, it would depend on Tax Auditors having a very specific technical training on the ECF, given the number of models of authorized equipment and the technical complexity of the tax laws involving the ECF.

Moreover, with the advent of the Electronic Invoice - NF-e, implemented in Brazil in 2006 under the national coordination of the National Association of State Tax Administrators and Coordinators – ENCAT, and which was mandatorily introduced for use by all economic and industrial wholesale sectors from 2008 to 2010, there was a true revolution in the work of Tax Verification in Brazil. Today the entire industry and the wholesale sector in Brazil issue Electronic Invoices for commercial transactions involving goods. We have over 1 million taxpayers issuing the NF-e and from 2006 until today, more than 9 billion NF-3 invoices were issued throughout the country, being a highly successful project. Brazil is nowadays a world leader in the field of electronic tax documents.

However, it was necessary to modernize electronic invoicing for retail businesses and this great opportunity brought about the Consumer Electronic Invoice - NFC-e.

The NFCe was based, from the technical and implementation strategy standpoint, on the successful experience of the NF-e, yet adapted to the realities of retail businesses.

The NFCe project began in November 2011, with the participation of 32 voluntary retailers and 7 states (Acre, Amazonas, Maranhão, Mato Grosso, Rio Grande do Norte, Rio Grande do Sul and Sergipe). With the previous experience of the NF-e, the NFCe pilot project advanced rather quickly, and on March 1, 2013 the first NFCe legally valid in Brazil was issued by the company Casa das Correias in Amazonas State.

Today, the NFCe project has already entered the massification stage; more than 3 million legally valid NFCes have been issued by over 3,000 retailers and 4 states have already published mandatory implementation schedules for replacing the ECFs by the NFCe (Acre, Amazonas, Mato Grosso and Rio Grande do Sul). It is also important to note that of the 27 Federal States in Brazil, 18 have already expressed interest in implementing the NFCe in the coming years.

The NFC-e represents a real tax revolution in the Brazilian retail sector, a project that can be considered a win-win, because all the actors

involved in the retail business benefit from it. The State Treasury wins by getting via the NFCe real-time information in their database on the sale made. The retail business wins by undergoing a large cost reduction from the NFCe, no longer bring required to have a fiscal printer and remove a number of accessory tax obligations, such as x reading, the Z reduction, the cash register summary map, the seals, etc. In addition, retail businesses are able to increase and decrease their cash registers without the need for authorization from the tax authorities.

With the NFC-e the retail business can also innovate, by having the possibility of selling goods on its premises and better serving its customers.

The consumer also benefits by having assurance on the validity of electronic invoices and being able to check it using his/her smart phone or tablet, in real time, immediately after the sale. Society wins by having a meaningful impact in ecological terms from reduced paper use and promoting the use of new technologies and innovations in the business environment of the retail sector.

1. BACKGROUND ON THE INITIATIVE

The NFC-e project started in November 2011 with a request from State Finance Secretaries to the General Coordinator of ENCAT - Meeting of National State Tax Administrators and Coordinators, at a meeting of the CONFAZ so that the ENCAT would study and propose an electronic solution, similar to the Electronic Invoice, for retail businesses.

With the start of the project, technical workshops were held from November 2011 to July 2012, with technical representatives of the Secretariats of Finance interested in the subject for the initial design of the assumptions that would guide the NFC-e project and the conceptual model of the solution.

The assumptions made by the technical group, initially only the State Treasury, and which were validated by the State Tax Administrators, at a regular meeting of ENCAT, were:

- Agreement with the NF-e standards;
- Electronic solution without the need for hardware;
- Reduction of the Brazil cost;
- Failure to require standardization or hardware or software;
- Minimal interference with the taxpayer's surroundings;
- Participation of Private Initiative in the Project.

In August 2012, participation of private enterprise in the NFC-e project and the pilot project began.

The 7 States that voluntarily decided to join the pilot project were: Acre, Amazonas, Maranhao, Mato Grosso, Rio Grande do Sul, Rio Grande do Norte and Sergipe. Although the State of Sao Paulo did not participate initially in the pilot project, as it was involved in the development of a fiscal control solution project for retail businesses based on hardware known as SAT Fiscal, it appointed -- at the request of the General Coordination of ENCAT -- a Tax Revenue Agent, Newton Oller de Mello, who was responsible for the implementation of the NF-e in the state. His mission was to set up a technical team for the pilot project, which he immediately took over as National Leader for the NFC-e Project under ENCAT.

The states participating in the pilot project then issued invitations to business retailers to participate in the project as volunteers and 32 retailers from different sectors and sizes accepted the challenge of working together with State Treasury teams for the design and implementation of the NFC-e.

Below is the list of 32 voluntary companies that participated in the pilot project:

Company (Corporate Name) – State of the Federation

1. C COM Shopping - Acre
2. Makro - Acre
3. Supermercado Araújo - Acre
4. NFC-e
5. Casa das Correias - Amazonas
6. COMEPI - Amazonas
7. FARMABEM - Amazonas
8. Grupo Braga - Amazonas
9. Makro - Amazonas
10. Mirai Panasonic - Amazonas
11. Armazéns Matheus - Maranhao
12. City Lar - Mato Grosso
13. Lojas Avenida - Mato Grosso
14. Makro - Mato Grosso
15. Grupo Pão de Açúcar (Cia Brasileira de Distribuição) - Mato Grosso
16. TODIMO - Mato Grosso
17. BR Distribuidora - Rio Grande do Norte
18. Lojas Riachuelo - Rio Grande do Norte
19. Miranda Computação - Rio Grande do Norte

20. Lojas Renner - Rio Grande do Sul
21. NFC-e
22. PANVEL (DIMED) - Rio Grande do Sul
23. PAQUETA CALÇADOS - Rio Grande do Sul
24. TOK&STOK - Rio Grande do Sul
25. ZAFFARI - Rio Grande do Sul
26. ITA Bolos - Sergipe
27. Lojão dos Cosméticos - Sergipe
28. Lojas Riachuelo - Sergipe
29. MERCANTIL RODRIGUES (Cencosud Brasil) - Sergipe
30. Ricardo Eletro - Sergipe
31. SERPAF - Sergipe
32. SOS Baterias - Sergipe

From the second half of 2012 several technical meetings of the NFC-e pilot project were held between the tax authorities and businesses. These meetings took place in several parts of the country.

In February 2013, the NFCe, model 65 national tax legislation was established by way of Agreement SINIEF No. 01/2013.

Later, on March 1, 2013, the first NFC-e of Brazil was issued by the company House Correias das from Amazonas State.

On November 7, 2013, the NFC-e project was awarded the 2013 Automation Award from the GS1 Brazil entity in a ceremony held in Sao Paulo.

On November 18, 2013, at an event with over 400 participants and several authorities held in Porto Alegre, the NFC-e pilot project phase was closed and the rollout of the NFC-e phase was launched.

On July 1, 2013, by way of Resolution GSEFAZ n ° 022/2013, the State of Amazonas established its mandatory schedule for NFC-e implementation, effective on March 1, 2014. Following this example, the State of Mato Grosso also established its mandatory schedule for 2014 on August 1, 2013, by way of State Decree No. 1877 and the State of Acre, on November 8, 2013 by way of State Decree No. 6596. More recently, on March 6, 2014, the State of Rio Grande do Sul also published its mandatory schedule by way of State Decree n ° 51,245, beginning in September 2014.

The national tax legislation has already been fully adapted to the NFC-e with the publication of the Agreements SINIEF n ° 11/2013 of July 2013 and 22/2013 of December 2013.

The NFC-e is currently in a major phase of implementation, as 18 federal states have already expressed interest in implementing the solution of this new electronic tax document for the retail business sector in the coming years.

2. DESCRIPTION OF THE INITIATIVE

The NFC-e aims to be a fully electronic alternative to current tax paper documents used in the retail business, significantly reducing the costs of ancillary obligations to taxpayers, while allowing improved tax controls by the Tax Administrations. With the NFC-e, the consumer also benefits by allowing the verification of the validity and authenticity of the tax document received.

The NFC-e Project proposes the establishment of a national standard for electronic invoicing, based on the technical standards of success of the Electronic Invoice, however adapted to the particulars of the retail business. The implementation of NFC-e falls under the discretion of each state of the federation, and it can coexist with other fiscal control mechanisms, currently in existence.

The scope of the NFC-e covers commercial sale transactions, on-site transactions or home delivery transactions to the final consumer (individual or corporation), in inside State transactions and without the possibility of generating a credit for the Goods and Services Sales Tax (ICMS) for the buyer.

The NFC-e follows the same technical standard of the NF-e, and is also an electronic file in XML format that contains the digital signature of the issuer. Like the NF-e, the NFC-e must also be approved in real time, in front of the cash register, before the sale is completed.

After authorization of the NFC-e, the consumer will receive an auxiliary paper document entitled Ancillary Document to the Consumer Electronic Invoice (DANFE and NFC), very similar to the current tax receipts, and having a QR code printed.

Thus, in possession of the DANFE NFC-e and using a smart phone or tablet containing a QR code reader, the consumer can check the validity and authenticity of the NFCe directly on the website of the Secretariat of Finance.

If authorized by the consumer, the DANFE NFCe may be printed in summarized or ecological format, without printing the detail of

merchandise items. The NFC-e legislation also allows exceptions in DANFE NFCE printing, at the discretion of the State and if the consumer agrees, with the shipping of the NFCE to the consumer by e-mail.

The NFC-e project also included other technological developments into the existing model of the Electronic Invoice. They included the possibility of transmission of the NFC-e file in a batch with just one document and the request of synchronous processing along with the sending of the compacted lot, reducing the size of the XML file by more than 70%. This resulted in significant improvement in reduced processing time, estimated at 7 times.

Another distinguishing feature of the NFC-e is the possibility of using a new type of contingency, entitled "offline." In case of technical problems preventing the approval of NFC-e, or when the response processing time is not suitable for commercial operation, the NFC-e issuer could issue an electronic document and print the DANFE NFC-e, with subsequent delivery of the authorization e-file within 24 hours.

3. TARGET AUDIENCE

The potential target audience is all retail businesses in the country, without regard for their size or sector, which could now use the Consumer Electronic Invoice as sales tax document. As potential beneficiaries, in addition to issuing commercial establishments, we have all end consumers in their purchases of retail goods and the State Tax Administrations. However, the implementation of the NFCE falls under the discretion of each state of the federation because of the tax autonomy that exists in Brazil.

Fortunately, 18 states have already expressed interest in adopting the NFCE in the coming years, and the NFCE already operates in 7 states under the initial pilot project.

Therefore, the scope of the NFCE project is immense, and for this reason we can say that with the NFCE, we are facing a true tax revolution for retail businesses and the consumers' buying experience.

4. DIFFICULTIES FOUND

The main difficulty faced by the NFCE project was resistance to the proposed replacement of the current control systems based on equipment approved by the State Treasury - ECF for an innovative solution based on software solutions. This resistance stemmed from lobbying by

manufacturers of ECF equipment, who see in the NFCe a clear threat to their business niche, as well as tax administrations where control of the retail sector today is based primarily on control of the NFCe. This resistance was mainly evident in the adoption of NFCe national legislation, where states opposing the NFCe solution also have the right to vote.

This internal difficulty the Treasury is confronting was minimized and overcome with a strong strategic and political work of Coordination by the ENCAT based on tax cooperation and the search for consensus, mitigating conflicts. The strategy is not to confront or forcefully replace the ECF-based model by an NFCe solution in every state, but precisely having the NFCe become another alternative available to States. Thus, the strategy of convincing other states to adopt the NFCe became another demonstration of the results and benefits that the solution clearly has against other existing fiscal control alternatives.

With regard to the opposition from ECF manufacturers, it was naturally suppressed by the technical features of the NFCe, which lead to innovation and flexibility of commercial operation, making it unavoidable to contain the technological advances provided by the NFCe.

It should be pointed out that initially another technical difficulty that was overcome was whether to create an entirely new tax document, adapt the existing electronic document, the NF-e, or use the NF-e design as a new type of electronic invoice. The decision that prevailed was the last and it was quite successful in terms of implementation strategy, because the use of the same NF-e model 55 file design only included having this design recognize a new NFCe document model 65. Subsequently, adjustments to validation rules were made, enabling rapid deployment of the NFC-e.

5. RESULTS

As a concrete result of the implementation of the NFCe, the NFCe is already a reality in 7 states of the country (AC, AM, MA, MT, RS, RN and SE) for more than 3,000 companies and more than 3 million electronic tax documents have been issued.

Another 11 states have shown interest and are working to implement the NFCe in the coming years, for a total of 18 of the 27 states of Brazil. In addition, 4 states of the country have already posted NFCe mandatory use schedules replacing fiscal printers from 2014 (AC, AM, MT and RS). Soon, more states will also publish their mandatory implementation schedules.

It is important to highlight that many retailers have already migrated all their fiscal printers to the NFCe solution, showing great satisfaction with the result.

There are no studies on the rate of reduction of the cost of tax compliance for retail businesses with the NFCe. However, we have received information from companies that have already implemented the NFCe that time of the return on investment, taking into account the large cost savings involved, has been generally less than 1 year.

Since each state is responsible for the NFCe implementation, we do not have the investment amounts. However, given the technical decision that NFCe use the same electronic file structure as the NFe model 55 (same design), we can say that the investment costs of the states for the NFCe authorization development solution are small, almost comparable to servicing the existing NF-e system. It has been estimated that the tax documents in the retail sector are 8 to 10 times greater than the volume of electronic invoices issued by industries and wholesalers, that is, more than 2 billion tax documents per month in Brazil.

The main expected benefits that start to become reality with the NFC-e are:

For NFC-e issuing companies:

- Cost reduction with the:
 - Elimination of mandatory implementation of fiscal equipment for issuing the NFC-e;
 - Failure to require any hardware or software approval;
 - Possibility of use of non-fiscal printer;
 - Simplification of accessory obligations (elimination of Z reduction, X reading, cash register map, stamp placement, intervention certificate records);
 - Failure to require the figure of Technical Auditor;
 - Using paper with no time-saving requirement;
 - NFC-e Online or Real Time Transmission;
 - Significant reduction in paper costs.
- Integrated with Fiscal Citizenship programs (elimination of subsequent delivery to the Tax Printer File under the Secretariat of Finance as REDF);
- Use of New Mobility Techniques;
- Flexibility of expanding points of sale at the business without the need to obtain authorization from the Treasury;

- At the discretion of the Federal State and the interests of consumers, possibility to print ancillary summary documents, or just e-mail;
- Integration of Physical and Virtual Sales Platforms.

For the Consumer:

- Possibility to query in real time or online their NFC-e on the SEFAZ website;
- Security as to the validity and authenticity of the business transaction;
- Possibility to receive NFC-e DANFE or Ecological (summarized) or by email or SMS.

For the State Treasury:

- Real-time information of tax documents;
- Improved fiscal controls for the wholesale business;
- Possibility of remote monitoring of transactions, cross-checking of data and electronic audit.

For Society:

- Reducing paper consumption, with positive impacts on the environment;
- Possibility of innovation and use of new technologies;
- Improving the business environment of the country, with a reduction of unfair competition, based on tax evasion.

6. TECHNOLOGICAL ARCHITECTURE

The NFCe technological architecture follows open standards of XML electronic files and Web Service communication.

The business certified as NFCe issuer forwards the XML file digitally signed with the digital certificate of the company (certified entity) issued under the ICM Brazil standard.

This transmission may be made synchronously with one single NFCe batch or asynchronously in batches of up to 50 NFCe or 500 kilobytes. This delivery should be made to the NFCe Authorization System of the State where the company is located.

However, not all states that allow the NFCe have the authorization system in place, so they can use the NFCe infrastructure and authorization service of the State of Rio Grande do Sul through an

Expense Reimbursement Agreement. This model is known as the Virtual SEFAZ of RS. Currently there are 4 NFCe authorized systems: Amazon SEFAZ System, Mato Grosso SEFAZ System, Rio Grande do Sul SEFAZ System, and RS Virtual SEFAZ. The states of Acre, Maranhão, Rio Grande do Norte and Sergipe use the RS Virtual SEFAZ to approve the NFCe of their taxpayers.

Each State that has implemented the NFCe must provide a website where consumers can check the validity and authenticity of their NFCe by typing the password, which is a sequence of 44 digits that uniquely identifies the NFCe or directly by checking the QR Code printed on the printed NFCe printout (DANFE NFCe).

7. RELEVANT INFORMATION

For the dissemination of NFCe, 1 instructional video and two viral videos of the NFCe project were made, sponsored by companies and organizations such as ETCO and GS1. Below are links to the videos on YouTube:

Institutional Video

<http://www.youtube.com/watch?v=wIh-qoCt8pl>

Ecology Online Viral Video

<http://www.youtube.com/watch?v=nngTQMusWfo>

Viral Video on Flexibility for Increasing Number of Cash Registers

<https://www.youtube.com/watch?v=vKBsiC0UDi0>

The NFCe Project was one of the winners of the 2013 Automation Award of the GS1 Brazil. More information available on <http://www.gs1br.org/>

8. PROJECT TEAM

NFCe Project National Leaders:

- Almerindo Rehem – Secretariat of Finance, State of Sergipe
- Newton Oller de Mello – Secretariat of Finance, State of Sao Paulo
- Luiz Dias – Secretariat of Finance, State of Amazonas

NFCe Pilot Project State Leaders:

- AC - Raimundo Vianney Aires de Almeida
- AM - Luiz Dias de Alencar Neto
- MA - Edimilson Santos Ahid Neto
- MT - Deusangela Ribeiro
- RN - Leonardo Santos de Amorim and Marconi Brasil
- RS- Vinicius Pimentel de Freitas
- SE - Alberto Schetine

ENCAT Technical Coordination

- Alvaro Bahia – Technical Coordinator – Secretariat of Finance, State of Bahia
- Vinicius Pimentel de Freitas – Assistant Technical Coordinator – Secretariat of Finance, State of Rio Grande do Sul

ENCAT General Coordination

- Eudaldo Almeida de Jesus – General Coordinator – Secretariat of Finance, State of Bahia
- Luis Gonzaga Campos de Souza – Assistant Coordinator – Secretariat of Finance, State of Roraima

NFCe Pilot Project Business Leaders

- Juliana Domingues- Business Conglomerate Leader - Wal Mart
- Claudio Willermann – Assistant Business Leader – Todimo

Name: Eudaldo Almeida de Jesus and Newton Oller de Mello

Agency/Entity/Company: ENCAT – National Association of State Tax Administrators and Coordinators

Position: ENCAT General Coordinator

Phone Number: (71) 8881-4619 o (71) 3115-2400

Email: encat@sefaz.ba.gov.br; eudaldoaj@yahoo.com.br

ELECTRONIC DOCUMENTS. SOLUTIONS FOR SMALL AND MEDIUM ENTERPRISES - EXPERIENCE OF CHILE

Michel Jorratt

Director

Internal Revenue Service

(Chile)

***Contents:** Executive summary. 1. Background. 2. Mipyme tax portal
2.1. SH free electronic invoicing portal. 2.2. Simplified taxation system.
2.3. Mipyme complete accounting system. 3. Conclusions*

EXECUTIVE SUMMARY

The Chilean Tax Administration offers, free of charge to all taxpayers in the country, a tax portal with useful and practical applications in order to facilitate tax compliance for both businesses and natural persons.

The main reason for this was the necessity that the micro, small and medium-sized businesses (MIPYMES) had to integrate and develop general aspects of the Electronic Management of their Businesses in relation to the Issuing of Electronic Invoices and the submitting of the Electronic Information of Purchases and Sales (IECV).

This is a challenge because this taxpayer segment has fewer possibilities to know of and implement the Technologies, either because of their Company Culture, lack of familiarity with new technologies or lack of economic capacity to hire the services of professional consultants to aid them in the use of these new technologies.

The MIPYME Tax Portal of the Chilean Tax Administration is focused on the micro, small, and medium-sized businesses of the country, and its main objective is to increase the competitiveness of the MIPYMES through the massive use of Information Technology. The objective is to be able to transfer new management skills and techniques so that the MIPYME can take advantage of IT in its tax and accounting management.

For this, three large applications have been made available to taxpayers through the MIPYME portal:

- Electronic Invoicing
- Simplified Taxation
- Complete Accounting

These last years there has been an increase in the number of taxpayers that have preferred to use electronic invoices and to issue Electronic Tax Documents using the free applications available in the MIPYME Tax Portal of the Chilean Tax Administration.

Since 2005, the Chilean Tax Administration (SII) has offered taxpayers free solutions to facilitate taxpayer compliance such as the issuance of electronic tax documents like electronic invoices. Afterwards, the SII offered simplified taxation to taxpayers who complied with the prerequisites, and, in the short term, we will launch electronic accounting. All of these applications can be found in the MIPYME Tax Portal of the SII.

All of these applications are of great help to the taxpayers, providing them with better benefits and saving money, time, and space. In addition to improving their business by making them more competitive and incorporating them into the modernization of the country.

It's worth mentioning that the taxpayers that don't meet the requirements of the segment to use the MIPYME Portal have the option of using Electronic Invoicing and Electronic Accounting Ledgers and Journals through applications or software available on the market.

We should clarify that the classification of businesses as potential users of the SII Portals is based on their level of sales. Micro businesses are considered those with sales below US\$ 100,000 a year, Small businesses are considered those with sales between US\$ 100,000 and US\$ 1,100,000 a year, and medium-sized businesses are those with sales over US\$1,100,000 a year but less than US \$4,300,000. Therefore MIPYMES are defined as businesses with annual sales under US \$ 4,300,000.

MIPYMES businesses mostly concentrate in the following economic activities:

- Farmers, Livestock, Foresters
- Artisan Workshops
- Businesspeople (wholesalers, retailers, suppliers)

- Service Providers
- Professionals
- Transporters.

1. BACKGROUND

The recent law passed in Chile that requires the use of electronic tax documents aims that electronic invoicing be used by 100% of taxpayers, which will lead to increased productivity and competitiveness for businesses, lowered invoicing costs and will have a positive environmental impact since important resources will be saved that until now were spent on the creation of paper invoices. For taxpayers, invoice authorization is simplified, physical storage of the invoices is no longer needed, and moreover, since the SII will have all of the Purchases and Sales information, the SII will be able to generate for all taxpayers a VAT Declaration Proposal. Finally, for the SII, to achieve that 100% of the taxpayers use electronic invoicing will allow a more efficient VAT control since there are fewer possibilities for false tax documentation, it strengthens the control of tax documentation, enhances a more consistent control between different taxes, and it's possible to carry out massive crosschecks of information between taxpayers' Purchase and Sales Ledgers and Journals.

On the other hand, a large portion of the services and procedures carried out at the SII are done online. For example, in 2012, 99% of the income tax declarations, 100% of the sworn statements submitted by the taxpayers, 93% of the VAT declarations and 90% of VAT payments were submitted via the Internet. Also, 76% of the business activity start-up statements and 85% of the end of business activity statements were issued online.

Currently 52% of invoices in the country are issued electronically, and the website www.sii.cl is the most visited government site.

1.1. SII developments

The SII has been one of the pioneers, on a national and worldwide level, in topics such as the online Income Tax Declaration and in the development of online products and services for taxpayers. These developments aim at facilitating tax compliance through the provision of more and better electronic services and the control of said operations.

In this context, we highlight the following initiatives:

- **Online Taxpayer Lifecycle**

Taxpayers have been offered the possibility of doing the procedures electronically for each of the different stages of their economic activity (business start-up statement, business end of activity statements) thus facilitating voluntary compliance.

- **Electronic declaration of information about third parties (Sworn Statements)**

It's information about third parties, either individuals or businesses, which is submitted to the SII. This information is regarding income, tax exemptions, credits, and in general different information which is required to check the information submitted by taxpayers in their tax declaration or tax return requests. There are over 70 Sworn Statements grouped by type of tax: income, VAT, VAT Export, and Document Stamping tax. All the Sworn Statements are submitted online. They are in standardized formats and taxpayers are obliged to submit them.

- **Taxpayer Identification**

The Taxpayer Register, the Secret Password, and also the Digital Certificates are the means established so that taxpayers can identify themselves on the SII website and carry out their tax procedures in a private and safe manner.

- **Online Tax declaration and payment**

Online services are now available so that taxpayers can declare and pay annual income tax, monthly taxes such as VAT, and can also submit their Sworn Statements with information they are obliged to inform to the SII. Also, foreign investors can certify their taxes paid in Chile through the Internet.

Additionally, the SII on its website has made available to taxpayers an Income Tax Declaration Proposal. Thus, this tax administration, for the past 10 years, has made a significant impact in the simplification of tax compliance and in the reduction of compliance costs.

- **Electronic Invoicing**

In operation since 2002, its use allows tax validation of commercial transactions carried out using electronically generated documents,

with an important saving of resources in comparison to those carried out in physical form. Currently more than 52% of invoices in the country are issued electronically.

- **Electronic Receipt for Services Rendered**

The Electronic Receipt for Services Rendered has the validity as those issued on paper.

- **Electronic Accounting Journals**

A taxpayer who does accounting digitally and prints the Ledgers and Journals on paper stamped by the SII, may be authorized to not print them and generate them in an electronic form established by the SII. Once authorized, the taxpayer must:

- Once a month submit the Purchase and Sales Journals in digital format.
- Once a year submit a digital summary of the accounting registers.
- Maintain the accounting registers (Ledgers and Journals) in digital format, in complete form, with the necessary backup to guarantee their security.

- **Other Relevant Services**

- Online payment of Real Estate Taxes: allows property owners to pay their taxes online. In addition, they can request a Real Estate Appraisal Certificate.
- Electronic Invoices of domestic sales and exports.
- Electronic Sales and Services receipts; authorization of paper for cash registers.
- Online Tax Payment System: The system allows the payment of income tax, Value Added Tax (VAT), real estate taxes and charges determined by the tax administration on account of differences in taxes and fines.
- Issue of Certificates of Residence and Tax Situation for foreign investors.

However, it is not enough to have these opportunities for online interaction with taxpayers if we do not offer tools and value-added services that are affordable and accessible to all taxpayers. For this reason, we have made progress in implementing a Portal for the Micro, Small and Medium-sized businesses called MIPYME, with a free of charge electronic invoicing and accounting system.

2. MIPYME TAX PORTAL

The SII MIPYME Tax Portal was created as a public-private alliance and is part of a project which aims at promoting the business management of Micro, Small and Medium-sized businesses as well as their tax compliance. Its main objective is to contribute to increasing their competitiveness.

The MIPYME portal offers three main tools:

- Electronic Invoicing or SII Free Invoicing Portal
- Simplified Taxation
- Complete Accounting

2.2. SII free Electronic invoicing portal

The purpose of this Portal is to provide an electronic invoicing system conceived and designed especially for micro and small businesses that have a low volume of issuance of tax documents. This system allows them to issue and receive electronically: invoices, exempt invoices, credit notes, debit notes and waybills, generically called Electronic Tax Documents (DTE for its initials in Spanish).

2.2.1. Advantages of using the MIPYME portal

- Reduces Costs (document stamping, custody, paper).
- Improves Efficiency in Business Cycles (improves invoicing notification, facilitates collection and payment management).
- Increases productivity (saves time, redistributes resources).
- Improves Customer / Supplier relationship
- Avoids the loss of VAT credit due to lost issued documents.
- Avoids fines due to lost not issued stamped documents.
- Allows to postpone the declaration and payment of VAT to the 20th of each month

2.2.2. Tax requirements

The requirements that the business must comply with to be accepted in the MIPYME Electronic Invoicing System are:

- To have a valid business start-up statement
- To be a first category taxpayer according to the Tax Income Law.
- If it is a VAT taxpayer it must have a certified domicile.
- To have annual sales not exceeding US \$ 1.000.000. In the near future this requirement will be eliminated.

- Not to have been prosecuted or punished for infringement of tax law.
- Not to have pending situations with the SII.

2.2.3. Technical requirements

To properly use the SII MIPYME Electronic Invoicing Portal, the taxpayer should verify that their computer has the following:

- Has a valid digital certificate.
- Has internet access.
- A Browser (Initially, Internet Explorer 5.5 or higher).
- A printer. Which should ensure the printing quality of the DTE copy (laser, inkjet etc?)
- An e-mail account for receiving information sent by the SII.
- Adobe Acrobat Reader program, which is free.

In addition, the user must verify that they have followed all the instructions listed in the manual “Necessary Components to use the SII Electronic Invoice” found at: www.sii.cl section ‘Factura Electrónica’ (Electronic Invoice).

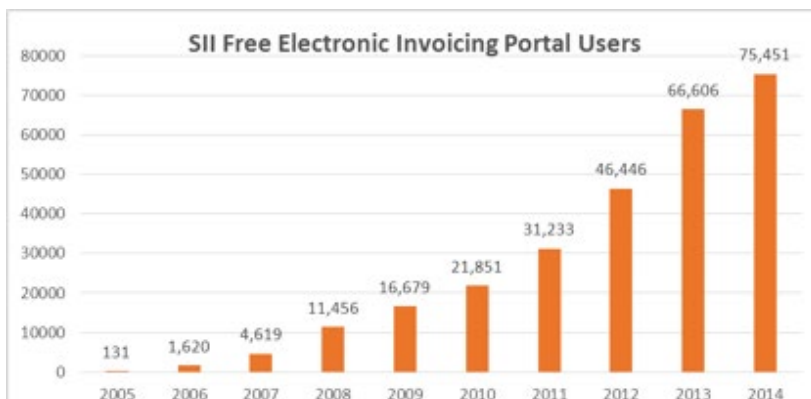
2.1.4. Features

Issuance of Electronic Tax documents At the Portal the taxpayer can go through the whole process of generating, issuing and printing Electronic Tax Documents.

SISTEMA DE FACTURACIÓN GRATUITO DEL SII
Para acceder a las opciones identificadas con (*), debe contar con certificado digital y tener configurado su computador.

- Emisión y administración de documentos tributarios electrónicos (DTE)**
 - Emisión de documentos
 - Factura electrónica
 - Factura No afecta o evento electrónica
 - Nota de crédito electrónica
 - Nota de débito electrónica
 - Guía de despacho electrónica
 - Factura de compra electrónica
 - Historial de DTE y respuesta a documentos recibidos
- Ayudas**
 - Instalar certificado digital
 - Requisitos y configuración del computador
 - Guías de ayuda
 - Preguntas frecuentes
- Cesión de factura electrónica**
 - Seleccionar documentos para cesión (*)
 - Registro electrónico de cesión de créditos
- Herramientas de apoyo a la micro y pequeña empresa**
 - Sistema de tributación simplificada**
 - ¿Qué es el sistema de tributación simplificada?
 - Verifique factibilidad e inscribese
 - Sistema de tributación simplificada (14 Ter)
 - Sistema de contabilidad completa**
 - ¿Qué es el sistema de contabilidad completa?
 - Verifique factibilidad e inscribese
 - Sistema de contabilidad completa
- Administración de libros de compras y ventas**
 - Información electrónica de compras y ventas IECV
 - Creación, edición y envío de libros
 - Asignación de DTE recibidos a libros de compras
 - Casos prácticos de llenado de libros
 - Propuesta parcial del F29 (a partir de IECV enviado)
- Consultas de recepción de DTE y libros en el SII**
 - Consultar recepción
- Actualización y mantenimiento de datos de la empresa**
 - Seleccione la empresa con la que desea operar
 - Actualizar datos

- Display and re-print a printable version of a DTE issued by the Electronic Invoice System, in order to give an additional copy to whoever requests it.
- Verify on the SII website (www.sii.cl) the DTE received/issued on the Electronic Invoice Portal, in order to check the veracity of the document.
- Generate and send answers to DTE received through the System, to accept or reject a received document.
- Create Electronic purchase and sales ledgers and journals
- Up-load of the Electronic purchase ledger and journal
- Transfer of Electronic Tax documents. The transfer of documents is an important aspect for the financing of the small and medium businesses. This process is known as Factoring. This application allows generating the electronic file of the transfer and notifying this transfer to the electronic Public Register of Credit Transfer, free of charge.



2.2. Simplified taxation system

2.2.1. MIPYME simplified taxation

Income Tax Law, in its article 14 ter, establishes a regime for taxation and for simplified accounting to determine the tax base of the income tax declaration of the First Category taxpayers who meet the conditions and requirements under this legal provision.

It is an optional regime aimed at the micro and small businesses and whose aim is to determine the tax base of the income tax declaration through a simplified accounting method consisting in the difference between annual incomes and expenditures of the taxpayer.

2.2.2. Benefits of MIPYME simplified taxation

- Free from the obligations of complete accounting
- Provisional payments fixed rate at 0.25% of monthly gross sales
- Immediate deduction as investment expenses and inventories
- The Net Taxable Income is easily determined.
- Allows you to determine your tax automatically.
- The system generates a proposal for the Monthly VAT declaration and a proposal for the Annual income Tax Declaration.
- The system facilitates the preparation of Salary and Income Sworn Statements
- It will allow you to generate a Simplified Financial Report to access funding.

2.2.3. Advantages of MIPYME simplified taxation

- Reduction of transaction costs
- Operating Safely in the IT System.
- Greater credibility.
- Opportunity for small individual companies to modernize and use Information Technologies.
- Accountants are redefined as intermediaries of finance, management and technology.

2.2.4. Requirements to join the regime

The requirements necessary to invoke Article 14 ter of LIR are:

- Being required to declare actual income, in accordance with complete accounting, for First Category incomes.
- Be Natural Persons or Individual Businesses with Limited Liability (EIRL for its initials in Spanish).
- Be a Value Added Tax (VAT) taxpayer
- Not to have as a business activity the possession or exploitation of agricultural and non-agricultural properties. Nor activity of real estate capitals; not perform real estate or financial activities except those necessary for the development of its core business.
- Not own or operate, shares in companies, or form part of partnership contracts or accounts in participation as manager.
- Annual sales less than US\$ 400,000.

2.2.5. Simplified taxation system on MIPYME portal

In 2007 the SII implemented an application on the SII MIPYME Tax Portal so that taxpayers who were using simplified taxation could keep their records in digital format.

To register and use the Simplified Taxation System the taxpayer must already use the Electronic Invoicing System on the MIPYME Tax Portal, and at the same time use the Simplified Taxation Regime of Article 14 ter of the Tax Law.

In order to register and operate in the system the taxpayer must have a digital certificate.

2.2.6. Advantages of the system

- The system automatically creates records of income and expenditures which are required to determine the taxable amount of income tax.
- Electronic documents which are sent and received are directly recorded in the accounting. And non-electronic tax documents and other transactions which do not have a corresponding tax document, for example, salary payments, interest payments, etc. are typed directly into the journals used by the system.
- The taxable amount of the business profit tax is calculated automatically, from the difference between income and expenditure recorded in the accounting journals.
- The system generates a proposal for the monthly VAT return (Form 29) and a proposal for the annual income tax return (Form 22).
- In addition, the system generates proposals of Sworn Statements of Salaries (Form 1887) and of Receipts for Services Rendered (Form 1879). Also, the system generates certificates to be given to employees and service providers, whichever is applicable.
- The system also generates reports of the tax results obtained by the business, with the purpose of submitting it to third parties, for instance, in the case of financing requests.
- The use of this system is free of charge for taxpayers.

2.2.7. Features of the MIPYME simplified taxation system

Access to the system

The following features of the MIPYME Simplified Taxation System are available on the MIPYME Tax Portal:

1. System features

- Enter information of previous fiscal year.
- Management of accounting periods, tax and non-tax registers.
- Proposal of codes for Form 22
- Draft of Sworn statements for Salaries (Form1887) and for Receipts for Services Rendered (Form1879) and the ability to issue the corresponding certificates.
- System reports
- Proposal of codes for Form 29

2. Verification of feasibility and, if feasible, registration in the System

The screenshot shows the SII website's main menu and service categories. The 'Herramientas de apoyo a la micro y pequeña empresa' section is highlighted with a red circle, containing the following options:

- Sistema de tributación simplificada
 - ¿Qué es el sistema de tributación simplificada?
 - Verifique factibilidad e inscribese
 - Sistema de tributación simplificada (14 Ter)
- Sistema de contabilidad simplificada
 - ¿Qué es el sistema de contabilidad simplificada?
 - Verifique factibilidad e inscribese
 - Sistema de contabilidad completa

Registers

In order to register the information that allows determining the taxable amount in accordance with the Tax Law, the system uses the following monthly journals:

1. Purchase and sales Ledgers: These ledgers are part of the electronic invoicing system; they register the tax documents that inform of the taxpayers' purchase and sales operations. It is possible to access them from the Simplified Taxation application.
2. Payroll Register: the purpose of this is to register all the salaries paid by the taxpayer.
3. Receipts for Services Rendered Register: the purpose of this is to register all the Receipts for Services Rendered paid by the taxpayer.
4. Other Incomes Register: The purpose of this is to register all incomes obtained by the taxpayer recorded in non-tax documents, such as fixed assets sales, -excluding non-depreciable fixed assets, and other incomes of business activity.
5. Other Expenditures Register: The purpose of this is to register all the taxpayer's expenditures recorded in non-tax documents, such as the purchase of fixed assets – excluding non-depreciable fixed

assets-, rents, interests, other taxes, other expenditures recorded in non-tax documents.

System Reports

The following reports can be obtained from this system:

- **Results Status:** it is created with the accumulated information of every month-end closing of a given year.
- **Tax Cash Flow Status:** It is created with the accumulated information of every month-end closing of a given year.
- **Monthly Evolution of Income Tax:** It is created with information from the last 12 month-end closing

Proposals of Sworn Statements for Salaries and for Receipts for Services Rendered (Forms 1887 & 1879)

The system offers proposals of Sworn Statements for Forms 1887 and 1879, as well as the corresponding certificates to be issued by the taxpayer when requested by third parties, in formats established by the SII.

The proposal for the Sworn Statement 1887 is made based on the information submitted by the taxpayer in the Payroll Register and the proposal for the Sworn Statement 1879 is based on the information submitted in the Receipts for Services Rendered Register.

Proposal for Form 29

The system offers a proposal for the codes of Form 29, which is made based on the information submitted monthly by the taxpayer into the auxiliary books of the system.

If the taxpayer wishes to declare Form 29 based on the proposal, they must go to "Monthly Taxes" on the SII website where there is an option to automatically upload to the Form the proposed codes.

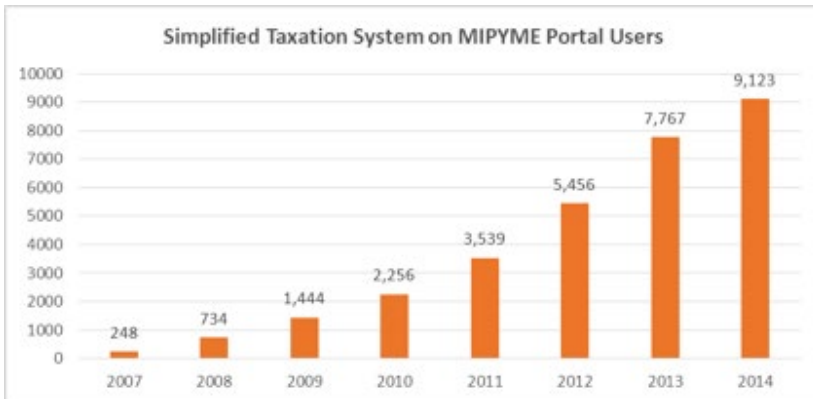
Proposal for Form 22

The system offers a proposal for the codes of Form 22, which is made based on the information of the year-end closing.

As of the fiscal year 2008, for the natural persons who use the Simplified Taxation System of the MIPYME Portal, the SII added to

their declaration proposal offered in the Income Tax Operation Portal, the information of the codes calculated in the Simplified Taxation System.

The Individual Limited Liability Companies do not have a declaration proposal offered to them in the Income Tax Operation Portal. Thus, they must manually transfer the figures calculated in the simplified taxation system to their Income Tax Return.



2.3. Mipyme complete accounting system

This system allows taxpayers to register information regarding commercial transactions in their corresponding accounting journals to comply with their tax obligations. Also, taxpayers can obtain financial statements in any fiscal month. Obtain accounting reports and support the calculation of the Net Taxable Income and the creation of FUT register.

Obtain code proposals for the declarations Form 29 and Form 22. Automatically generate Sworn Statements for Salaries and for Receipts for Services Rendered. Integrate into other SII electronic systems (for instance, MIPYME electronic invoicing).

The complete accounting system is an IT solution which supports tax compliance for taxpayers who are registered in the SII Invoicing System and who are not eligible to use the Simplified Taxation System since it requires them to have Complete Accounting.

The objective of the SII Complete Accounting System is to simplify accounting management and facilitate tax compliance for smaller companies that pay taxes in accordance with complete accounting

and meet the requirements to use it. Through an IT system specially designed for these businesses, they can do the following:

- Record information regarding their commercial transactions in their corresponding accounting journals in order to comply with their tax obligations.
- Obtain financial statements in any fiscal month.
- Obtain accounting reports and support the calculation of the Net Taxable Income and the creation of the FUT register.
- Obtain proposal of codes for the Form 29 and Form 22 returns.
- Automatically generates Sworn Statements of Salaries and of Receipts for Services Rendered.
- Integrate into other SII electronic systems (for instance, SII electronic invoicing)

2.3.1. How it works

- The system operates with an Accounts Plan designed for the business segment which can be adapted to the needs of the taxpayer, adding subaccounts as required to register its operations.
- Transactions performed by the business using the SII Electronic Invoicing System, and which make up the sales and purchase ledgers and journals, are also automatically added to the SII Complete Accounting System. Whereas, transactions related to Receipts for Services Rendered, Salaries and other transactions, are registered directly through options created for this purpose.

2.3.2. Requirements

- a) To be a First Category Taxpayer in accordance with the Income Tax Law.
- b) Issue electronic documents using the SII Invoicing System.
- c) Not be in regimen 14 bis or 14 ter of the Income Tax Law.
- d) Comply with tax obligations:
 - Not be in default in the payment of their taxes.
 - Not have any negative annotations.
- e) The Legal Representative of the Taxpayer and users authorized by the taxpayer should not have any pending situations with the SII.
- f) Not be constituted as a Corporation.

SII Servicio de Impuestos Interiores

Identificar Nuevo Contribuyente | Cerrar Sesión

Inicio | Registro de Contribuyentes | Impuestos Mensuales | Factura Electrónica | Boleta de Honorarios | Rentas | Declaraciones Juradas | Bienes Raíces | Situación Tributaria | Tasaación de Vehículos | Libros Contables | Infracciones y Condicionales

CONTABILIDAD COMPLETA ELECTRÓNICA PARA MICRO, PEQUEÑAS Y MEDIANAS EMPRESAS (MIPYMES)

En esta página Ud. podrá acceder a toda la información y servicios relacionados con la Contabilidad Completa Electrónica que el SII pone a disposición de los contribuyentes Micro, Pequeños y Medianas Empresas (MIPYMES).

Selección de Empresa

Libros Auxiliares

- Libro de Remuneraciones
- Libro de Honorarios
- Libros de Compras y Ventas

Asientos Centralizados

- Asiento Libro de Ventas
- Asiento Libro de Compras
- Asiento Libro de Remuneraciones
- Asiento Libro de Honorarios

Ajustes y Otros Movimientos

Libro Diario

- Cerrar Libro Diario
- Consultas al Libro Diario

Libro Mayor

Generación de Estados Financieros

Libro de Inventario y Balance

Información Tributaria

- Visualización de Líneas y Códigos F29
- Generación de Declaración Jurada 1879/1887
- Base Imponible Tributaria (RLI)
- Libro F27
- Visualización de Líneas y Códigos F22

Libros Contables Electrónicos

- Resúmenes de LCE
- Detalles de LCE

Información de Contabilidad Completa MIPYME

- Descripción de Contabilidad Completa MIPYME
- Preguntas Frecuentes

Inscripción en el Sistema

- Verificar factibilidad de Inscripción
- Inscripción en el Sistema

Información para Operar el Sistema

- Configuración Mínima de Hardware y Software
- Configuración de computador y Certificado Digital (*)
- Manual de Usuario
- Ayuda Rápida
- Manual de Cuentas
- Glosario

Plan de Cuentas del Ejercicio

Asiento de Apertura

Cierre del Ejercicio

Cierre por Término de Giro u Otros Motivos

Desinscripción del Sistema

Modificación Datos Empresa

- Actualización Logotipo de la Empresa
- Eliminación Logotipo de la Empresa
- Actualización de Datos del Contribuyente
- Mantenimiento de Usuarios Autorizados

2.3.3. Accounting process

TRANSACTIONS

Constitution of the company.
 Purchase of Goods.
 Purchase of Machinery and other assets.
 Sale of Goods.
 Returns of Purchases and Sales.
 Payment of Services or Expenses.
 Payment of Salaries.
 Payment of Taxes, etc.

DAILY JOURNAL

We analyze whether the transaction is a quantifiable Economic Event.
 It establishes which items are involved and how they are affected if they increase or decrease.
 The transaction is registered in the Daily Journal as a Journal entry.

LEDGER

The amounts of each account registered in the Daily Journal are transferred to the same account located in the Ledger.

All the debits and credits of each account are added up and the difference between them is determined to be debit or credit or if the account is settled, i.e. if there is the same amount of payments as charges.

FINANCIAL STATEMENTS

Corresponds to an in-depth analysis of a business up to a certain date, because it shows the account balances on the closing date.

Shows the financial results and the performance of the business (Balance sheet and Results).

Balances are obtained from the Journal.

2.3.3.1 Daily system

In the Daily Accounting System all annotations are made directly in the Daily Journal, which means that the business records a large amount of information in just one book.

2.3.3.2. Centralizing system

As transactions made by companies tend to increase, it is necessary to divide the Daily Journal in as many sub-books as the registries of the operations requires, the applicable legislation requires or simply due to the information needs of the business.

Thus a series of auxiliary books are created which register the transactions carried out by the business and subsequently a summary of these books is centralized in the Daily Journal.

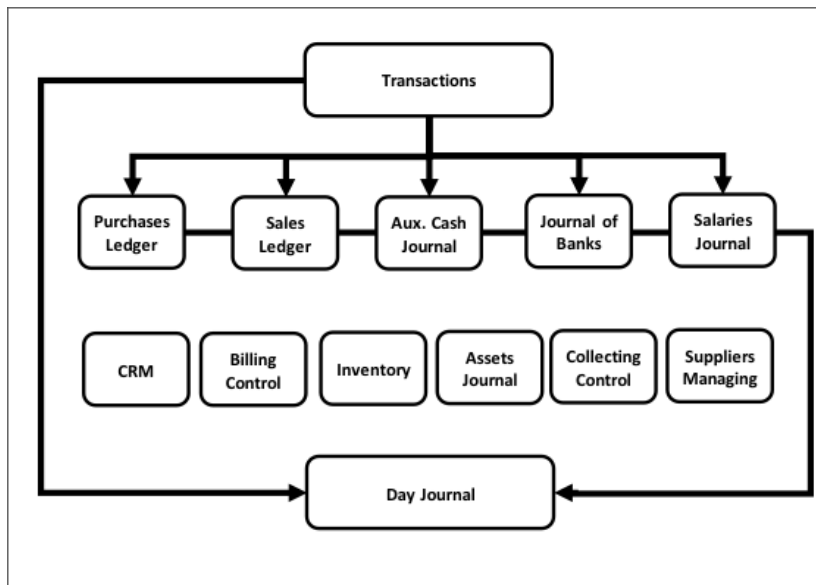
- **Auxiliary books**

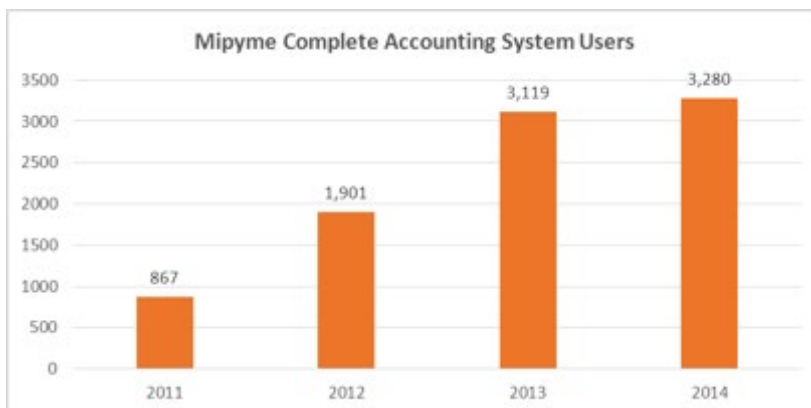
- A. Purchases Auxiliary Journal and Sales Auxiliary Journal. At the end of each month a separate summary of taxable income, debits and fiscal tax credits will be calculated where applicable. This summary must exactly match the data that should be in the declaration form, already having made the adjustments that apply for debit and credit notes received or issued in the respective tax period. All the entries made in these books must be justified with the corresponding legal documentation.
- B. Auxiliary Cash Journal, which as its name implies, is created in order to record all the flows of the cash register.

- C. The Auxiliary Inventory Journal is required of manufacturing industrialists, importers and wholesale merchants, whose amount of purchases of raw material and / or goods in general exceeded US \$ 400,000 during the year, must enable registers of requirements of raw materials, manufactured or finished products, semi-finished products and of goods in general.
- D. Auxiliary Journal of banks, clients, and of suppliers is created in order to obtain more accurate information to achieve a better management of these accounts that form the core of the business.
- E. Salaries Journal as stated in the Labor Law, which states that “every employer with five or more workers must keep an auxiliary Salaries Journal, which must be stamped by the SII.
- F. All those obliged to withhold taxes of third parties must have a Withholdings Journal. The withholding taxes that should be registered are the following:
 - a) Capital Gains Tax
 - b) Workers Income Tax.
 - c) Withholding tax of 10% of Receipts for Services Rendered and participation of Directors in businesses.
 - d) Additional tax
 - e) Tax on small and medium-sized mining businesses.

Centralizing System

Here is a diagram of the Centralizing System:





3. CONCLUSIONS

The use of IT technology is a tremendous opportunity, since technology allows less procedures, greater user use, increased internal control, and more and better information obtained immediately by the SII. These are all benefits for all the participants in the market: Government, Taxpayers and Tax Administration.

On the other hand, to achieve the expected massive use of electronic invoicing, it is necessary that the country have a technological infrastructure, accompanied by people familiarized with these systems. Also necessary is that businesses and individuals have access to computers and internet.

The Tax Administration must also have developed a software infrastructure to support large volumes of information, allowing it to process and store information of final sales of all taxpayers. In addition, it is essential to develop applications for taxpayers and tax officials. In the case of the SII, we have advanced in this considering that 100% of the tax cycle can be carried out online. Also 99% of the tax returns, 93% of the VAT statements and 100% of the Sworn Statements from third parties are submitted online, as well as being the most visited government website by taxpayers.

Therefore the challenge is to continue perfecting these taxpayer applications in order to massify online submission of information to the SII and the use of the MIPYME Tax Portal. While at the same time having the IT infrastructure to receive all the information, process it and generate computer cross-checks, allowing the control and detection of tax differences, thus reducing tax evasion and increasing tax collection.

COOPERATION WITH THE PRIVATE SECTOR FOR THE USE OF ELECTRONIC INVOICES IN RETAIL SALES - CASE OF MEXICO

Adrian Guarneros

Panning General Administrator
Tax Administration Service
(Mexico)

Contents: 1. Background. 2. Collaboration experience between the Tax Authority and the private sector. 3. Success story in the issuance of digital fiscal vouchers and collaboration. Wal-Mart Mexico. 4. Conclusions and benefits.

1. BACKGROUND

In Mexico there have been different valid schemes or ways of issuing fiscal vouchers, ranging from the issuance of paper invoices up to the issuance of electronic invoices. The latter is the one currently prevailing and the only one regulated by current fiscal provisions. A fiscal voucher is that which proves an expense for deduction or crediting purposes, for whoever pays it, or income, which may be cumulative for whoever receives it; as a result of his economic and commercial activity.

Until 2004, the fiscal voucher issuing process in Mexico had been based on the use of printed paper. Companies and taxpayers invested part of their resources in printing services, distribution and control of printed forms, review, sending, verification of requisites, corrections and reissuance, as well as storage and organization of the paper. SAT did not have sufficient elements for avoiding the unauthorized production of printed vouchers (falsification).

The existing controls in the process of issuance of paper fiscal vouchers were insufficient to avoid undue acts which affected the federal treasury. It became evident that the implementation of actions for supporting collection was necessary, for which reason the strengthening of fiscal verification mechanisms was proposed, in order to ensure that the revenues, deductions and credits stated or applied by the taxpayers were true and correct.

In mid-2005, given the needs of taxpayers to close the invoicing cycle in a more efficient way, SAT developed the Digital Fiscal Invoicing scheme as an alternative for taxpayers. This made Mexico the second country in the American continent in developing an electronic invoicing model.

Some of the significant impact tools for the implementation of electronic invoicing are:

- Advanced Electronic Signature (ELSI) for signing and sending information in digital documents.
- Generation of Passwords for the use of electronic services by the taxpayers.
- Digital Seal Certificates (electronic signatures for specific use in sealing electronic documents).
- Use of a technological standard in XML language (eXtensible Markup Language), for the Exchange of electronic information.
- Creation of the Authorized Certification Supplier (ACP).
- Services involving consulting, verification and validation of electronic vouchers issued and received on line.

The transfer from the paper to the digital scheme has not been easy; it has been necessary to break paradigms regarding the value of paper documents. The traditional forms of issuance continue to be a certain part of the way taxpayers operate with respect to their issuance of fiscal vouchers.

Thus, the paper and electronic voucher schemes have had to operate simultaneously in recent years. The objective of migrating to the digital scheme has been progressive in such a way that, while the taxpayer has been induced to the use of electronic means, he has also been educated in their use.

This situation of coexistence of schemes prevailed from 2004 until 2013, for which reason the progressive obligation of issuing vouchers by taxpayer sectors was established, as follows:

1. Taxpayers whose income in the annual period did not exceed 286 thousand dollars¹ could continue to use paper.
2. The other taxpayers, who would have exceeded the 286 thousand dollars annually, would be obliged to use electronic invoicing.

The use of the Bi-dimensional Bar Code as requisite of the printed vouchers was partly used so that citizens could identify the use of technologies associated to the fiscal vouchers.

¹ Dollars of the U.S.A.

Starting in January 2011, electronic services were made available in the SAT Internet portal, whereby taxpayers, voucher issuers as well as receivers could:

- Validate the characteristics of the vouchers (structure and syntax of the electronic invoices issued and/or received).
- Verify the authenticity of folios and series used in the vouchers.
- Verify the legal effect of the digital seal certificates used to sign the vouchers.

Currently SAT counts on services related to the Electronic Invoice such as consultation and verification of the vouchers which the taxpayers have issued and those it has received. Said services are available to the taxpayer in the SAT Internet page, in the taxpayer portal where he may consult and print the vouchers that have been issued to him.

The electronic invoice, through the use of a technological standard (XML) managed to eliminate 158 requisites of the fiscal vouchers that were scattered throughout 27 articles of the law and 24 administrative rules of all the Fiscal Provisions. This technological standard (XML) is used in the fiscal voucher electronic file, known as Digital Fiscal Voucher by Internet (DFVI) or electronic invoice.

It is important to point out that in order to facilitate the issuance of the DFVIs, SAT made available to the taxpayers the Electronic Invoice Generating service, which consists of a free issuance basic scheme. Nevertheless, the taxpayer may hire a DFVI Certification Supplier, which in addition to the payment service, offers the taxpayers basic and free services.

In 2014, the fiscal provisions in Mexico determined 2 important aspects:

- Obligation of all taxpayers to issue only DFVIs as fiscal vouchers.
- There are no alternate verification schemes other than the DFVIs (those that had existed until 2013 disappeared).

2. COLLABORATION EXPERIENCE BETWEEN THE TAX AUTHORITY AND THE PRIVATE SECTOR

In instrumenting the Electronic Invoicing scheme it was essential to count on the strict collaboration of groups and varied sectors of taxpayers, which ensures compliance with the new provisions, without affecting their operations and allowing the information exchange, in order that the rules may be consistent with the

expectations of the authority and the taxpayer's actual operation. Collaboration between the authority and private sector has brought about good results so that the provisions may be well accepted by the taxpayer.

In SAT of Mexico, the composition of working groups with private sector groups regarding the fiscal vouchers, deals with three main aspects:

Normative. Facilitates the adequacy and normative regulation for implementing the electronic invoice and allows for the establishment of facilities and normative criteria for appropriate compliance by the taxpayers.

Technological. Allows the fiscal authority to become aware of the taxpayers' opinion regarding capabilities and standards of the technological support of the issuer as well as receiver of the Fiscal Voucher, by determining and regulating the technological supports and digital infrastructure, thus supporting the use and application of the networks in favor of a prompt and correct issuance scheme.

Dissemination. Bring into line the relevant information to arrive at a standard and concise dissemination scheme, by creating multiple contact and dissemination channels in collaboration with the private sector.

Agreeing with the public sector on solutions to specific problems and receiving feedback regarding possible modifications or new regulations allow the Tax Administration to anticipate itself to possible inquiries and difficulties that may specifically arise in the invoicing processes.

The joint authority – private sector work, allows for optimum decision-making on how to regulate correct fiscal compliance and the taxpayers' technological capacity. This means that before establishing a fiscal obligation one must know the taxpayer.

An example of what has been stated can be seen in the case of fiscal vouchers for the payment of salaries, wages and income similar thereto. In the 2014 fiscal reforms, it was established that employers had to issue a DFVI as receipt of salaries, wages and similar income, commonly known as "Payroll DFVI" for each of the payments made to their workers, sanctioning noncompliance with this provision with the non-deductibility of the Payroll payment; there being the obligation of the issuing employers to generate the Payroll DFVIs, through DFVI Certification Service Suppliers, or else using the free application offered by SAT.

In the structuring of the regulatory rules of the Payroll DFVI, it was necessary to reach an agreement regarding the position and opinion of different labor authorities, large employers and taxpayer sectors, in order to harmonize the fiscal and labor requisites, as well as the technological aspects, thereby involving 3 normative dimensions: Labor, fiscal and social security.

With SAT being the Fiscal Authority responsible for the publication of said provision, and additionally acting as receiver of the information in the fiscal voucher which, in addition, is also a technologically supported and technically complete proving document.

3. SUCCESS STORY IN THE ISSUANCE OF DIGITAL FISCAL VOUCHERS AND COLLABORATION

3.1. Wal Mart Mexico

This is one of the main commercial chains in Latin America and one of the largest multinationals in the world. Wal-Mart Mexico Central America has 8,500 stores in 15 countries, operating in Mexico as WALMEX.

It has commercial relations with over 16,000 suppliers, receives monthly over 1 million invoices and issues over 5 million of them to its customers, which makes it a large scale corporation.

Due to the number of transactions carried out with their suppliers as well as customers and for their control, it resorts to the use of new technologies, which places it in the forefront as a commercial enterprise, in addition to having its processes automated from point to point; that is, from the purchase order of products up to the sale to the public, for which reason it becomes a reference as regards the use and issuance of the electronic invoice.

Wal Mart began to approach SAT since 2002, when its control of receipts and disbursements were handled through EDI (Electronic Data Interchange). Given the need to modernize its verification schemes, this taxpayer found in SAT's vision initiatives related to the use of new technologies for simplifying the fiscal verification processes.

It is important to note that Wal Mart was pioneer in each of the instances when SAT modernized the verification schemes.

Wal Mart began with an invoice scheme through authorized printer; that is, verification on paper. When making payment for the purchase,

the customer received a ticket which was subsequently exchanged for a paper invoice that was given to him personally at that moment.

Subsequently, Wal Mart adopted the electronic invoicing scheme (DFV) which operated as follows: when making payment for a purchase, the customer received a ticket with an operation number that would serve him to request the electronic invoice at an invoicing kiosk or at the customer service office, which would be sent through electronic mail only.

In 2013 the Digital Fiscal Voucher via Internet (DFVI) was implemented which maintains the ticket with an operation number, facilitating its customers the downloading of his fiscal voucher, via a mobile device or from a computer connected to Internet, with the delivery thus being on line.

Its customers may generate their fiscal vouchers by using their purchase ticket and the different invoicing services: Internet, mobile, invoicing kiosks, customer service modules. It also offers its suppliers the technological tools that allow them to process from the purchase order up to the payment of their products and/or services, affording security and certainty through the vouchers received.

It is worth mentioning that the fiscal vouchers received by their customers and issued by their suppliers, may likewise be consulted and downloaded from the SAT page through the taxpayer's portal.

The communication between SAT and Wal Mart, for advancing with respect to the fiscal voucher was direct, with the fiscal authority following up and supporting specifically in the interpretation and application of the normative regulations and their synchronization with the use of technology, in order that Wal Mart could issue and respond to the demands of the customers and suppliers.

Wal Mart issues in average 200,000 DFVIs daily, generating them with the same platform in all its business formats and trade names.

3.2. Statistics on the issuance and receipt of Wal Mart Mexico fiscal vouchers.

SUPPLIERS

- + Than 16, 000 Suppliers
- + 1.3 million Invoices received monthly

INTERCOMPANIES

- + Than 500,000 Fiscal Vouchers issued per month.
- + Than 40 trade names of the group.

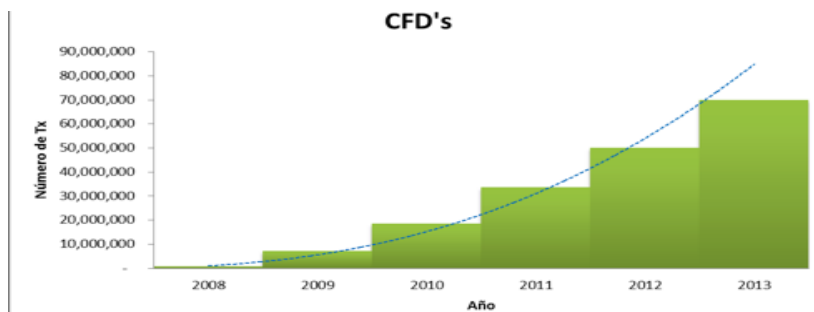
CUSTOMERS

- + Than 5 million Fiscal Vouchers issued per month
- Response time of less than 2 seconds

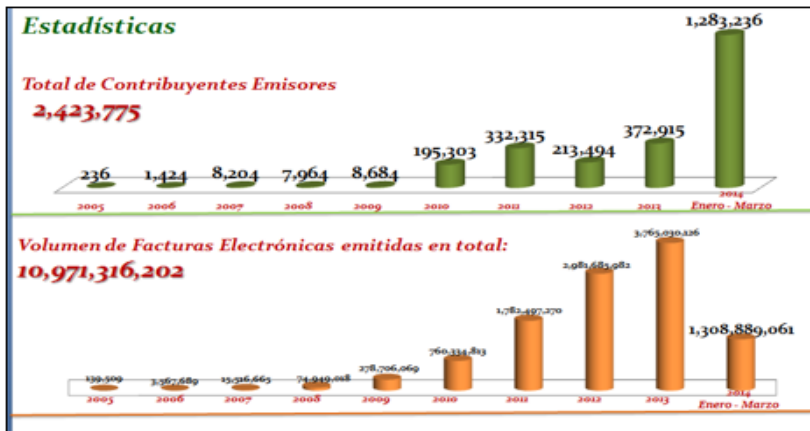
Using only their purchase ticket, its customers may obtain their DFVIs through the different services:

- Internet
- Invoicing Kiosks
- Customer Service
- Mobiles / Tablets

3.3. Evolution of the issuance of electronic invoice at Wal Mart Mexico



3.4. Result and statistics of electronic invoicing



As of April 2014, there are 77 DFVI Certification Service Suppliers authorized by SAT.

4. CONCLUSIONS AND BENEFITS

- The migration from paper to the digital scheme has been progressive.
- It is important to define a standard for the sending as well as for the contents of the information of the electronic invoices. (XML Language), technical inter-operability.
- Strengthening of the security controls and increased difficulty for generating false vouchers that affect the formal economy.
- Taxpayers may administer information in a virtual dimension with digital flexibility, thereby affording more practical, economic and efficient possibilities for transporting, sending and storing it.
- Achievements in electronic invoicing are mainly due to the unification of processes.
- Reduces administrative burdens inherent in the process and generates juridical security for those who issue as well as those who receive it.
- It facilitates control and administration of fiscal vouchers for the fiscal authority and is configured as information flow.
- The issuance of the electronic invoice is a protection measure for sustainable ecological development.
- Allows the reduction of costs, in the issuance, administration and control of electronic documents.
- The collaboration work between the Authority – Private Sector is of vital importance for achieving success in the implementation of electronic services.
- Automates the online inquiry and verification of the veracity of fiscal vouchers.

PREPAID PHONE CREDITS AS A MEANS OF PAYMENT

Ezekiel Saina

Deputy Commissioner
Revenue Authority
(Kenya)

Contents: Executive summary. 1. Introduction. 2. KRA payment gateway. 3. SMS and USSD information services. 4. Summary and conclusion. 5. References.

EXECUTIVE SUMMARY

The KRA payment gateway is an innovative mean by which taxpayers remit taxes through, among other channels, the mobile phone utilizing the USSD and SMS enabled technology. The technology includes secure real time integration with the banks' back-end systems, with reconciliation and reporting capabilities leveraging on the steady mobile phone penetration in the country which stands at 78%. The platform Reports Portal allows users to generate reports for transfer of revenue collected in specific time ranges from the KRA Paybill account to the Collection account at the designated Bank.

The revenue is then distributed to the various KRA accounts at the Central Bank of Kenya (CBK) by the bank based on predefined guidelines. The reports portal can also generate customized payments reports using various criteria. The portal also provides a facility to flag mobile payment transactions as "Utilized" once a taxpayer is offered a service to avoid reuse of transactions. The system provides an easy, convenient and secure method of revenue collection in the country.

1. INTRODUCTION

The general-purpose network branded prepaid card sector is one of the fastest growing segments of the consumer banking sector. While retail banking operations shrank in response to the 2008 financial crisis and the recession and regulatory responses that followed, the market for prepaid cards grew rapidly, in large part to fill the niche

opened up by the retrenchment of the traditional retail banking sector. Moreover, although prepaid cards traditionally catered to low-income consumers, prepaid card usage is rapidly becoming mainstream, as reflected by the entry of retail financial stalwarts such as American Express, JPMorgan Chase, U.S. Bancorp, and BB&T.1 prepaid cards are rapidly recognized.

Prepaid phone credit or Mobile Money is credit that is purchased in advance of access to service. Prepaid credit is used to access most of the services offered by a mobile network operator (MNO). Such services include internet access, sending SMSs, voice and video calls. In Kenya, prepaid credit is also used to top up bank accounts and can be withdrawn as cash from agents of mobile phone service providers. In public sector finance, prepaid phone credit is one of the channels used to collect taxes in Kenya under the Kenya Revenue Authority (KRA) Payment Gateway.

2. KRA PAYMENT GATEWAY

The KRA Payment Gateway (PG) is a standalone system for collection of all KRA taxes. PG includes secure real time integration with the banks' back-end systems. Currently, 27 commercial banks are integrated and live on the PG. KRA seeks to work with all willing commercial banks that have the capacity to integrate with the PG to deliver convenience to taxpayers, based on SLAs specifying responsibilities and expectations from each party. Commercial banks are expected to extend available payment modes to include Net banking, Credit/Debit card payments, Mobile banking, etc. which ease tax payment avenues. KRA does not pay any commission to partner banks; remuneration for commercial banks is in terms of liquidity (t+2) before sweeping collections to CBK/ Agency Beneficiary accounts. The basis payment for this model is a Payment Advice or E-Slip (each with a unique number) generated by the relevant KRA Business systems, i.e. iTax, Simba, etc.

This revenue collection platform seeks to; firstly, harmonize the payment process for all taxes in the Authority. Secondly, provide flexibility to the Taxpayers by enabling payment of all KRA taxes through the commercial bank branch networks, using various payment channels, including the Mobile Platform. Third, Provide Online/Real time Monitoring and Reporting on Revenue collection for all KRA departments. Fourth, improve Revenue Accounting and Reconciliation Process, fifth, consolidate taxpayer information on payments across KRA and lastly, Avail timely information to all KRA officers, and hence improve service delivery.

The KRA payment gateway is integrated with other government agents systems such as the single window. The 'Single window' environment aims to expedite and simplify information flows between trade and government and bring meaningful gain to all parties involved in cross border trade. Therefore a single window is a system that allows traders to lodge information which a single body (Kentrade) to fulfill all import or export related regulatory requirement. An illustration of single window environment is as shown in figure 1 a below.

Figure 1a
Illustration of Single Window Environment in Kenya

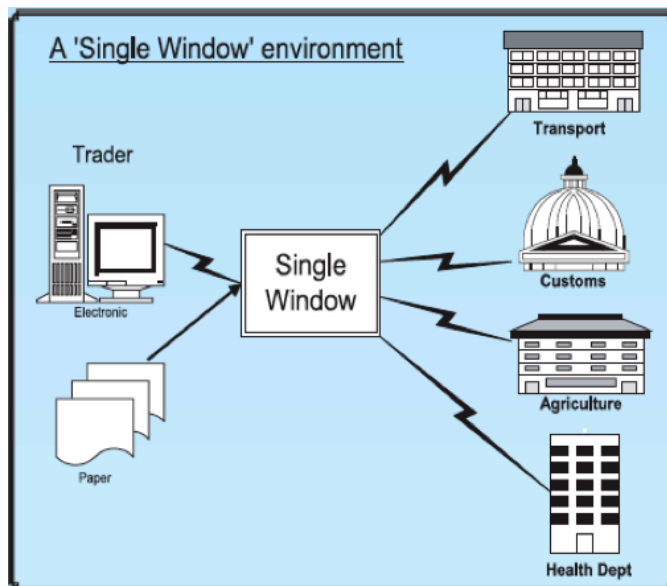
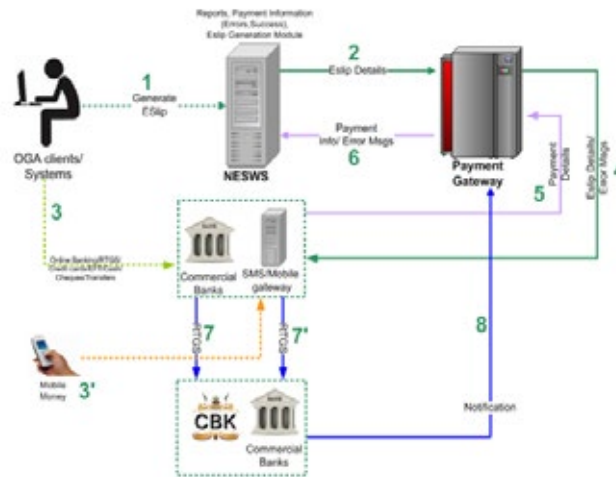


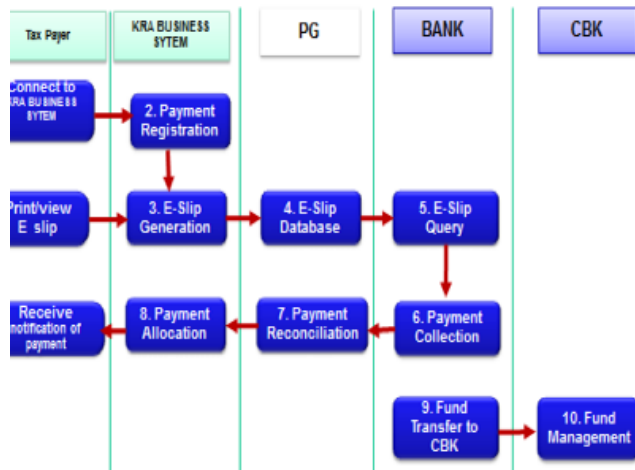
Figure 1b
KRA payment Gateway Work flow



Business Process Flow for PG and NESW

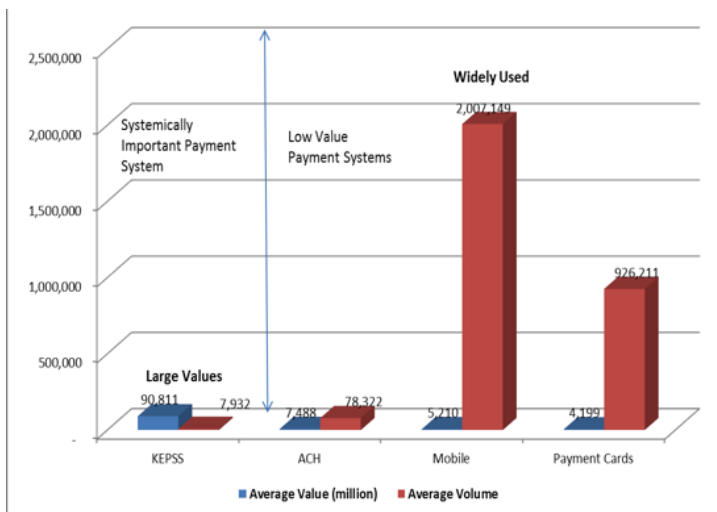
1. The Client/OGA logs into NESW and keys in information about the transaction they are interested in. They are identified via their PIN and the NESW provides them with an interface to select the appropriate revenue codes.
2. The NESW generates an ESlip for the transaction and sends it to the PG. PG will send an acknowledgement of receipt of the ESlip or an error message.
3. The OGA/client goes to the bank with the ESlip printout to pay the requisite fees.
- 3' The OGA/client pays the requisite fees via Mobile phone.
4. The Bank or SMS gateway retrieves the ESlip details from PG and validates the payment then receives the payment from the client and processes it in their core banking system.
5. The bank system sends payment details to payment gateway.
6. Payment gateway sends payment details to NESWS and sends an acknowledgement of receipt of the Payment details or an error message to the bank.
7. The Commercial Banks can send received payments to CBK if the OGA has a CBK account, or send the payments to a commercial bank (7') the OGA banks with as the case may be.
8. CBK sends a notification of receipt of the funds from the commercial bank to Payment gateway.

Figure 2:
KRA Payment gateway process flow.



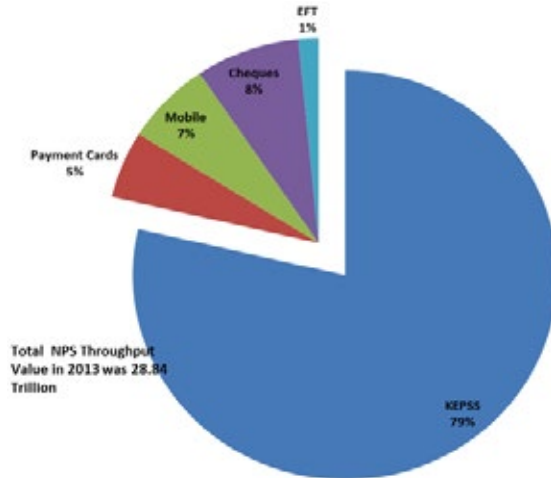
The payment gateway uptake has been on the rise in the past decade with mobile payments leading in average volume of transactions in Kenya according to the statistics posted by the central bank of Kenya. Figure 3a presents national payment gateway system daily average throughput.

Figure 3a
National payment gateway system daily average throughputs



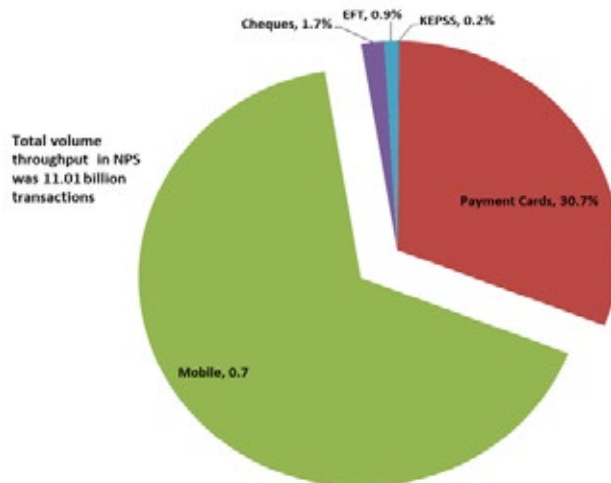
In terms of percentages, at national level, 79% of NPS share value was collected via KEPSS compared to 7% of mobile collections as illustrated in figure 3b.

Figure 3b
NPS share (b) for the value during 2013



In terms of transactions, mobile payment throughput was leading at 70% as shown in figure 3c

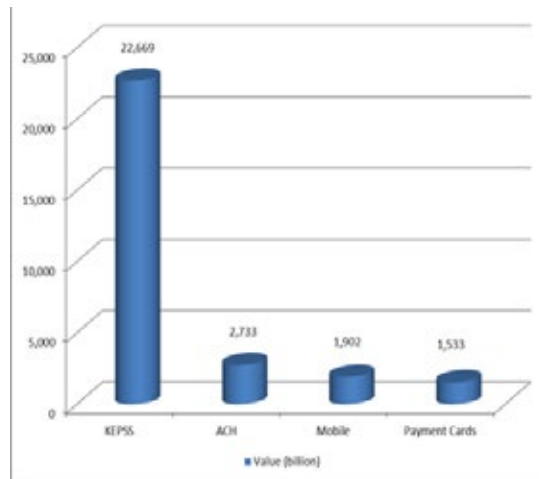
Figure 3c
NPS share for volume (m) during 2013



In KRA, the leading payment system by value is Kenya Electronic Payment and Settlement System (KEPSS) at Kshs 22,669 billion, however the mobile payment system handles substantial transaction throughput of Kshs 1,902 billion between January and December 2013, which was slightly higher than payment cards and Automated Clearing House (ACH). Figure 4a illustrates KRA Payment systems throughput volume (January to December 2013).

Figure 4a

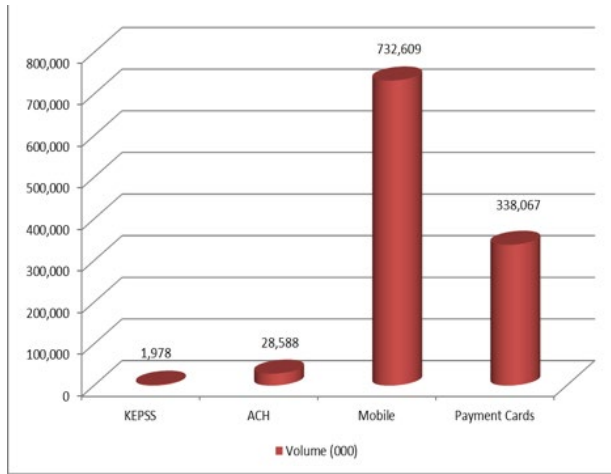
KRA Payment systems throughput volume (January to December 2013)



In terms of volume, mobile payment topped the list with 732,609,000 transactions within the same period compared to 1,978,000 transactions by KEPSS as illustrated in figure 4b.

Figure 4b

Payment system throughput in Volume (000) January to December 2013



This is the success story of the Kenyan retail payments. It has continued to grow significantly since inception and has revolutionised the banking industry through mobile banking.

Figure 5

Mobile follow from 2007 to December 2013

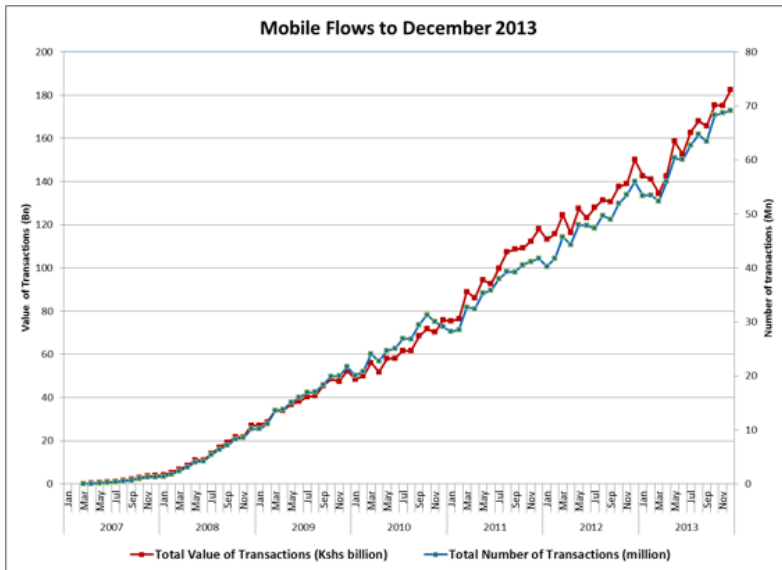


Figure 6
Mobile phone penetration in Kenya



Kenya covers a total area of 582,650 Sq Km with an estimated population of 43.18 million as at 2012. The Mobile Phone Penetration in the year 2013 had reached 78 % while the Bank Account Penetration stood at 35.2 % in 2013.

The Mobile Platform for Tax Payments in Kenya Seeks to;

- i) Leverage on the penetration of mobile phones and mobile money services throughout Kenya
- ii) Enable taxpayers to conveniently remit Taxes and/or Fees via Mobile Banking and other related platforms offered by various banks
- iii) Reduce risks associated with cash handling e.g. Fraud, cheque diversion, etc.
- iv) Reduce queues in KRA offices
- v) Reduce Cash in transit costs for KRA
- vi) Minimise on Printing and stationery costs
- vii) Eliminate reconciliation delays associated with payment using non-electronic means.

3. SMS AND USSD INFORMATION SERVICES

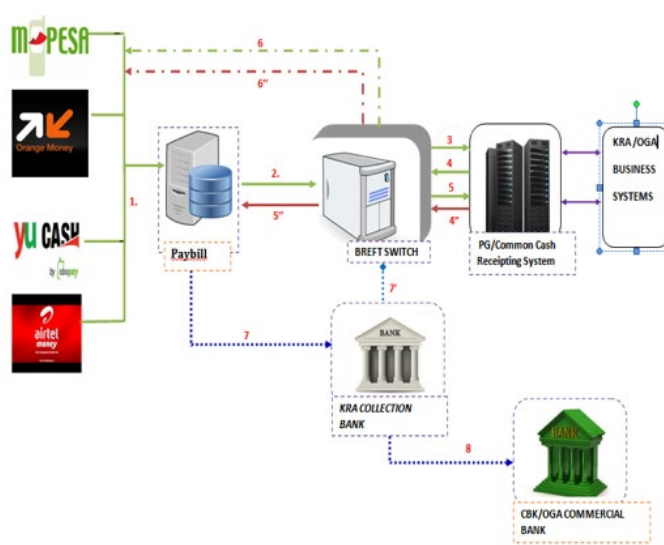
The first phase of the PG involves the utilization of SMS and USSD information services. The Unstructured Supplementary Service Data (USSD) is a protocol used by GSM cellular telephones to communicate with the service provider's computers. USSD can be used for WAP browsing, prepaid callback service, mobile-money services, location-based content services, menu-based information services, and as part of configuring the phone on the network. The connection remains open, allowing a two-way exchange of a sequence of data. This makes USSD more responsive than services that use SMS. The user composes a short text message using the phone. The phone sends it to the mobile phone operator network, where it is received by a computer dedicated to USSD. The answer from this computer is sent back to the phone. The answer could be seen on the phone screen, but it is usually with a very basic presentation. The messages sent over USSD are not defined by any standardization body, so each network operator can implement whatever it finds suitable for its customers. USSD is sometimes used in conjunction with SMS: the user sends a request to the network via USSD, and the network replies with an acknowledgement of receipt.

Through these services, customers make queries to KRA and get responses for a variety of services using short codes for Short Message Service (SMS) and Unstructured Supplementary Service Data (USSD). The services have been in use since October 2013 with over 21,000 message queries per month (Feb 2014), and growing. The services are accessible from all the four mobile networks in Kenya, i.e. Safaricom, Airtel, YuMobile and Orange.

The second Phase involves payment of taxes using Mobile Wallet Payments via MPesa, AirtelMoney, YuCash and OrangeMoney. Technical and business models were developed and agreed upon by all stakeholders. KRA identified a service provider to provide aggregation services for all GSM operators (MNOs). Figure 7 illustrates the Tax payment via mobile network operator wallet.

Figure 7

Tax payment via mobile network operator wallet Work flow diagram



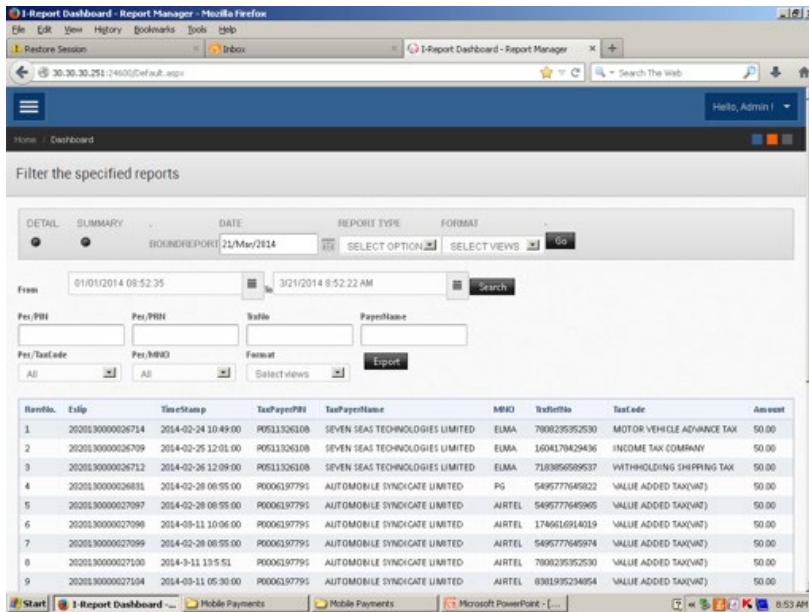
1. Taxpayer initiates transfer of money from mobile wallet to pay bill.
2. BREFT SWITCH picks the payment details
3. BREFT SWITCH transfers payments details file to NPG for validation and payment
4. National payment gateway gives an ok notification back to BREFT Switch.
- 4'. National payment gateway gives an error notification - leads to 5' Reversal back to customer's mobile wallet. In this case, step 5 does not occur.
5. BREFT switch advises the collection bank to debit and credit respective accounts.
- 5'. Collection bank responds back to BREFT Switch with successful as its status.
In case of failure BREFT Switch will resend the message again to the bank for as many times as the bank does not back with successful status.
6. The customer receives a notification via sms. The type of notification is either success or failure based on whether national payment gateway authentication resulted to a 4 or 4'.
7. Money is transferred from MNO's Bank Account to KRA's collection Bank Account
8. Collection Bank Transfer money to Central Bank.

TOPIC 1.1 (Kenya)

The platform Reports Portal allows users to generate reports for transfer of revenue collected in specific time ranges from the KRA Paybill account to the Collection account at the designated Bank. The revenue is then distributed to the various KRA accounts at the Central Bank of Kenya (CBK) by the bank based on predefined guidelines. The reports portal can also generate customised payments reports using various criteria.

The portal also provides a facility to flag mobile payment transactions as “Utilized” once a taxpayer is offered a service to avoid reuse of transactions.

Sample payments report



The screenshot displays the I-Report Dashboard - Report Manager interface. The page title is "I-Report Dashboard - Report Manager - Mozilla Firefox". The browser address bar shows "30.30.30.251:2400/DefSub.aspx". The user is logged in as "Hello, Admin".

The interface includes a navigation menu with "Home" and "Dashboard". Below the menu is a section titled "Filter the specified reports". This section contains several filters:

- DETAIL**: SUMMARY (selected)
- DATE**: BOUNDREPORT: 21/Mar/2014
- REPORT TYPE**: SELECT OPTION
- FORMAT**: SELECT VIEWS
- From**: 01/01/2014 08:52:35
- To**: 31/12/2014 8:52:22 AM
- Search**: [Search]
- Per/PBI**: [Input field]
- Per/PBH**: [Input field]
- Info**: [Input field]
- PayeeName**: [Input field]
- Per/TaxCode**: [Input field]
- Per/MNO**: [Input field]
- Format**: [Input field]
- Report**: [Report]
- Per/TaxCode**: All
- Per/MNO**: All
- Format**: Select views

The main content area displays a table with the following columns: **Serials**, **Edip**, **TimeStamp**, **TaxPayePBI**, **TaxPayeeName**, **MNO**, **Info**, **TaxCode**, and **Amount**. The table contains 9 rows of data:

Serials	Edip	TimeStamp	TaxPayePBI	TaxPayeeName	MNO	Info	TaxCode	Amount
1	2020130000026714	2014-02-24 10:49:00	P0511306108	SEVEN SEAS TECHNOLOGIES LIMITED	ELMA	7908235952530	MOTOR VEHICLE ADVANCE TAX	50.00
2	2020130000026709	2014-02-25 12:01:00	P0511306108	SEVEN SEAS TECHNOLOGIES LIMITED	ELMA	1604170429436	INCOME TAX COMPANY	50.00
3	2020130000026712	2014-02-26 12:09:00	P0511306108	SEVEN SEAS TECHNOLOGIES LIMITED	ELMA	7183956599537	WITHHOLDING SHIPPING TAX	50.00
4	2020130000026831	2014-02-28 08:55:00	P006197795	AUTOMOBILE SYNDGATE LIMITED	PG	549577645922	VALUE ADDED TAX(VAT)	50.00
5	2020130000027097	2014-02-28 08:55:00	P006197795	AUTOMOBILE SYNDGATE LIMITED	AIRTEL	549577645965	VALUE ADDED TAX(VAT)	50.00
6	2020130000027098	2014-03-11 10:06:00	P006197795	AUTOMOBILE SYNDGATE LIMITED	AIRTEL	1746616914019	VALUE ADDED TAX(VAT)	50.00
7	2020130000027099	2014-02-28 08:55:00	P006197795	AUTOMOBILE SYNDGATE LIMITED	AIRTEL	549577645974	VALUE ADDED TAX(VAT)	50.00
8	2020130000027100	2014-3-11 13:5:51	P006197795	AUTOMOBILE SYNDGATE LIMITED	AIRTEL	7908235952530	VALUE ADDED TAX(VAT)	50.00
9	2020130000027104	2014-03-11 05:30:00	P006197795	AUTOMOBILE SYNDGATE LIMITED	AIRTEL	838195234954	VALUE ADDED TAX(VAT)	50.00

Sample utilization reports

The screenshot shows a web browser window displaying the 'I-Report Dashboard - Report Manager' interface. The page title is 'I-Report Dashboard - Report Manager - Mozilla Firefox'. The browser address bar shows '30.30.30.251:24600/CPS.aspx'. The user is logged in as 'Hello, K00001237'. The page has a navigation menu with 'Home' and 'Dashboard'. Below the navigation is a section titled 'Filter the specified reports' with input fields for 'Per Year' (set to '2014/RTD') and 'TaxPayerName', and a 'Search' button. The main content area displays a table of tax payment transactions with the following columns: RowNo, ConfirmPayment, Estp, TimeStamp, TaxPayerPIN, TaxPayerName, MKO, TxRefNo, TaxDescription, Amount, DocSerialNo, and Ut. The table contains 7 rows of data, each with a 'Confirm' button and a 'Util' status.

RowNo.	ConfirmPayment	Estp	TimeStamp	TaxPayerPIN	TaxPayerName	MKO	TxRefNo	TaxDescription	Amount	DocSerialNo	Ut
1	Confirmed	2014/RTD/MIA/A9225	2014-03-04 08:39:00	P051132610B	SEVEN SEAS TECHNOLOGIES LIMITED	MPESA	E545B0015	COPY OF RECORDS	13.00	954156546	M: 2:1
2	Confirmed	2014/RTD/CIC/A9216	2014-03-04 02:16:00	P051132610B	SEVEN SEAS TECHNOLOGIES LIMITED	MPESA	E550D9008	DRIVING LICENCE COPY OF RECORDS - DL	10.00	0	M: 3:1
3	Confirmed	2014/RTD/CIC/A9216	2014-03-04 02:16:00	P051132610B	SEVEN SEAS TECHNOLOGIES LIMITED	MPESA	E550D9008	CERTIFICATE OF OWNERSHIP	10.00	0	M: 3:1
4	Confirmed	2014/RTD/BPS/A9236	2014-03-05 03:07:00	A005667131Y	NZERI CHRISTINE PHOEBE WAMBUI	MPESA	E5641K360	COPY OF RECORDS	17.00	123456	M: 6:1
5	Confirm	2014/RTD/ELD/A9242	2014-03-14 10:08:00	P0006197795	AUTOMOBILE SYNDICATE LIMITED	AIRTEL	0751769068024	DUPLICATE LOGBOOK FILLED	26.00		
6	Confirm	2014/RTD/ELD/A9242	2014-03-14 10:08:00	P0006197795	AUTOMOBILE SYNDICATE LIMITED	AIRTEL	0751769068024	COPY OF RECORDS	26.00		
7	Confirm	2014/RTD/MIA/A9144	2014-03-14 09:44:00	P051132610B	IANCE OGANGA	MPESA	ET81R0079	COPY OF RECORDS	8.00		

3. SUMMARY AND CONCLUSION

The payment gateway enables Taxpayers to remit taxes and/or Fees via Mobile Money/Wallet and Mobile Banking and Internet Banking platforms offered by various banks. The Payments are authenticated against E-Slip details at the KRA Payment Gateway before the money is submitted to KRA's Bank Account. The BREFT Reports portal provides a facility to flag mobile payment transactions as "Utilized" once a taxpayer is offered a service to avoid reuse of transactions. The reconciliation feature also facilitates reconciliation activities for all parties involved.

5. REFERENCES

Carol R. Van Cleef et al., emerging trends in stored value and prepaid cards 3 (Bryan Cave ed 2005), available at http://www.mtraweb.org/conferences/2005/VanCleef-MTRAEmerging_Trends_v3.pdf

Craft Silicon, (2013), Payment Gateway Integration Specifications and Guide Integration of Business Systems and Bank with Payment Gateway, June 20, 2013 Version 2.3, Kenya Revenue Authority Document

Gainde (2012), CCRS Interaction with Banks. CCRS – WEB SERVICE for BANKS Version 2.8, Kenya Revenue Authority Document

Tom Buterly, (2003). United Nations Commission for Europe: The single Window Concept, international trade procedures document.

Central Bank of Kenya, <https://www.centralbank.go.ke/index.php/rate-and-statistics/payment-system-statistics> retrieved on 23rd April 2014.

TOWARDS A 100% DIGITAL NETHERLANDS TAX AND CUSTOMS ADMINISTRATION

Peter Veld

Commissioner

The Tax and Customs Administration
(The Netherlands)

*Contents: 1. The Netherlands Tax and Customs Administration in a nutshell.
2. Organisation. 3. NTCA en route to 2017: the digital NTCA. 4. The Digital NTCA – Communication with individuals and enterprises.
5. Next steps towards the digital NTCA.*

1. THE NETHERLANDS TAX AND CUSTOMS ADMINISTRATION IN A NUTSHELL

1.1. The Netherlands Tax and Customs Administration (NTCA)'s standing mandate

The NTCA implements:

- the levy, audit and collection of state taxes, health insurance contributions, national insurance contributions and employee insurance contributions;
- the supervision of compliance with legislation on the import, export and transit of goods, and with the legislation in the economic, health, environmental and security fields, economic planning and financial integrity;
- the award and audit of income-related benefits
- the performance of investigations in all the aforementioned fields.

The NTCA performs these duties as effectively and efficiently as possible, and on the basis of legal certainty and legal equality.

1.2. What does the NTCA contribute?

What does the NTCA contribute to Dutch society? It provides for:

- funds for the Treasury;
- income support for the cost of rent, healthcare insurance, childcare and children;
- combating risks to society posed by goods including weapons, drugs, counterfeit medicines and narcotics;
- protection of society against fraud.

1.3. The NTCA's mission

The NTCA's mission is to:

Maximise the degree to which individuals and enterprises are voluntarily prepared to fulfil their statutory obligations (compliance).

Every year the NTCA processes 55 million tax returns and issues 9 million benefits, whilst Customs processes 12 million containers and 51 million passengers. The individual manual inspection of all these returns, declarations, applications, goods and passengers is impossible. Moreover, it is neither necessary nor desirable. Studies and practice have revealed that although the investigation and punishment of offences is sometimes necessary, as such this is insufficient to motivate individuals and enterprises to comply with the regulations. Investigation and punishment are primarily intended to protect society, as well as to demonstrate to well-intentioned individuals that compliance with the regulations is the standard and that divergent behaviour will not be not accepted.

Individuals and enterprises can be motivated to comply with the regulations in a climate in which compliance is self-explanatory, and in which individuals and enterprises feel an inner motivation to comply with their obligations. The NTCA intends to promote the best possible climate, by creating an environment that offers the maximum possible support and encouragement of good behaviour.

Compliance can be promoted only when individuals and enterprises can trust the NTCA. They will place this trust in the NTCA only when its integrity is raised above all shadow of doubt. Consequently, this lays the foundations for the NTCA's actions. Their entire staffs bear the joint responsibility for this trust, which is manifested in the form of its basic values of credibility, responsibility and due care.

1.4. Expectations

What do individuals and enterprises expect of the NTCA? There is no such thing as 'the' individual or 'the' enterprise. However, knowledge is

available about the expectations individuals and enterprises have of the NTCA. This knowledge is as follows.

Justice

Studies have revealed that trust in the tax administration is one of the factors determining compliance with the regulations. This trust is partly dependent on the experiences individuals and enterprises have of the support provided by and justification of its actions. An equal, impartial, respectful and supportive treatment of individuals and enterprises contributes to the trust in and the authority of the NTCA. This in turn has a beneficial effect on the compliance of individuals and enterprises.

Speed

Speed is a factor of importance to the extent to which individuals and enterprises appreciate the actions taken by the NTCA. Consequently, the NTCA has already made many efforts to speed up its processes. Its Benefit process, for example, is focused fully on making the monthly income support payments to the recipients of benefits in time: in the absence of these payments they would be unable to pay their healthcare contributions, rent or childcare fees. Customs has also for many years been aware of the importance of speed to the import and export of goods: it carries out its inspections as quickly as possible so that the delay in the flow of goods is minimised. Nevertheless, the Tax Monitor reveals that individuals and enterprises are of the opinion that everything can and should take less time. The NTCA continues to work on improvements to its speed to the benefit of well-intentioned individuals and enterprises.

Protection

Individuals and enterprises expect the NTCA to take action against persons and legal persons who deliberately disregard the regulations. The tolerance of offences against the regulations has decreased over the years. The NTCA is expected to take corrective action against offences, irrespective of the person concerned. This visible equal treatment ensures that well-intentioned individuals and enterprises will also comply with their obligations. These corrective actions are not restricted to protecting society from tax and benefits fraud, but also extend to protecting society from persons and organisations that, for example, perpetrate care or immovable property fraud or are engaged in the import or export of prohibited narcotics or weapons.

Clarity

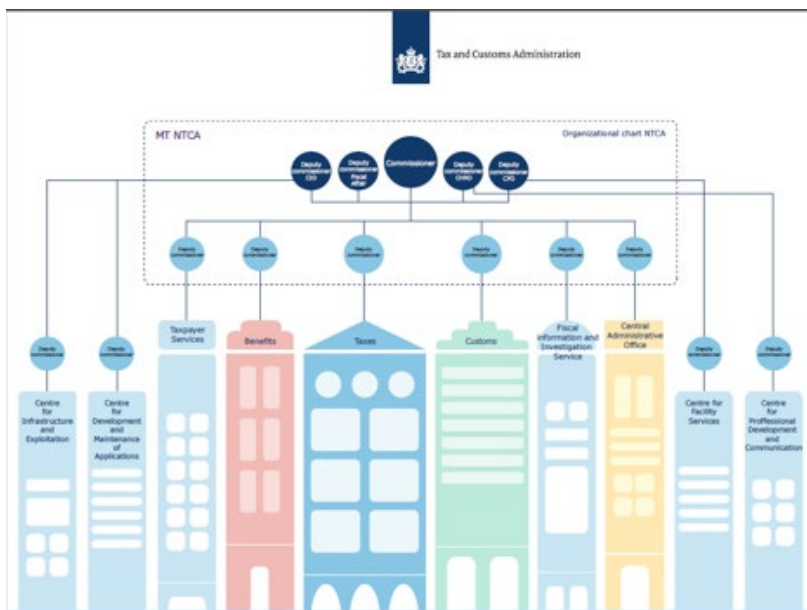
Individuals and enterprises wish to know what they can expect and receive the clear and clear information they need. Meetings with entrepreneurs reveal that 'no hassle with the NTCA' is being assigned an increasingly higher priority. The Tax Monitor reveals that individuals and enterprises perceive that the NTCA has lacked transparency in recent years.

Correctness

Individuals and entrepreneurs wish to receive correct information from the NTCA. Incorrect letters on, for example, benefits or income tax are often immediately followed by articles in the newspapers. The Tax Information Line is also expected to give completely correct answers. In addition, entrepreneurs wish to be able to rest assured that they will not be confronted with corrections to their tax returns after the end of tax return periods, or with corrections to Customs declarations that have already been settled.

2. ORGANISATION

2.1. General



The Director General of the NTCA is responsible for the management of the Administration and, together with his deputies, is a member of its Management Team.

The following officers are members of the Management Team:

- CIO (Chief Information Officer)
- CHRO (Chief Human Resource Officer)
- CFO (Chief Financial Officer)
- Tax Matters (Chief Tax Officer)

The directors of the most important divisions (Taxes, Customs, Benefits, Fiscal Intelligence and Investigation Service, Tax Information Line and Central Records) are also members of the Management Team.

The NTCA has a staff of 28,857 FTEs, the large majority of whom are assigned to the Taxes Division (15,662 FTEs).

2.2. Organisation of information services

The CIO is a member of NTCA's Management Team. The CIO is responsible for the provision of continual support to the NTCA's primary process by providing adequate and effective information.

Within this context NTCA has defined a triangle consisting of the demand for information services, the information services policy and the supply for information services. This triangle is brought under organisational units that jointly form the information services chain:

- Demand for information services: the business units' information management departments
- Information services policy: the CIO's office
- Supply for information services: Centre for Application Development and Maintenance (B/CAO) and Centre for Infrastructure and Operation (B/CIE)

The information services chain implements the CIO's agenda. For this reason the CIO manages the triangle to provide for appropriate cooperation, both in terms of the results achieved by the triangle and the contribution each element of the triangle makes to those results.

The CIO bears the overall responsibility for the B/CAO and B/CIE and manages the CIO's office.

The IM departments report to the Management Team via the business unit's member of the MT. However, the IM departments are also functional links in the information services chain and, consequently, contribute to the implementation of the CIO's agenda.

This presentation explains the digital developments in the area of taxes.

3. NTCA EN ROUTE TO 2017: THE DIGITAL NTCA

The NTCA's mid-term plans include plans for "the digital NTCA".

In keywords, the digital NTCA can be characterised as follows:

- Virtually 100% digital communication with individuals and enterprises
- Use of social media and apps
- Safety net for the non-self-sufficient
- Appropriate digital support for the staff
- Data management in order
- Reduction of the information services management costs, achieved by simplification and modernisation
- Information services infrastructure in order

3.1. General

The NTCA intends to implement further internal and external developments to evolve into a digital NTCA. In the future, virtually all incoming and outgoing messages from and to individuals and enterprises will be communicated by electronic means. NTCA's staff will also receive continually improving digital support for their work. The systems will no longer be of the nature of 'search locations'. They will offer the information that individuals and enterprises need to know what is expected of them. The staff will receive the information and analyses they need for their work.

In recent years, good results have been achieved from the work involved in getting the information services into order. The achievement of the targets set in the mid-term plan imposes even more stringent requirements on the information services chain. As a result, B/CIE is positioning itself as the government's information service provider within the government and B/CAO as the NTCA's system integrator.

3.2. NTCA - external

Digital communication offers major opportunities for improvements to the services provided to individuals and enterprises. The ambition

is to offer them a simple means of retrieving the data they need in digital form. They will also be able to arrange their issues with the NTCA by digital means and without needing knowledge of the NTCA's processes – an objective that is simply infeasible in a hard copy world. The opportunities for this are only expected to increase in the coming years, opportunities that the NTCA intends to utilise. Digitalisation simultaneously makes an important contribution to the achievement of the targets the NTCA has yet to meet.

Individuals and enterprises will need to gain an insight into the status of their tax returns, applications, notices of objection and payments, etc., at any time they require. Information about their rights and obligations will be made accessible to individuals in a manner compatible with their knowledge and skills.

The first step will be taken in the near future, when individuals will be able to receive digital post from the NTCA via the Message box (see below). New web portals will also be developed (my.belastingdienst.nl).

The social media will receive a fully-fledged place in the NTCA's compliance approach. In addition, an approach will be developed for the more integral use of the various service provider channels (telephone, website, message box and the social media). Apps will also gradually be introduced that individuals and enterprises can use in settling specific issues with the NTCA. A safety-net facility will be developed for persons who are unable to keep pace with the development of the digital NTCA.

The mandatory use of the SBR (Standard Business Reporting) by enterprises will gradually be expanded to include more incoming information flows. The architecture will prescribe that all NTCA flows are supplied via two channels, namely a basic supply via the personal domain for entrepreneurs and a facility via the SBR channel for tax service providers and entrepreneurs who make use of commercial software. More information about SBR is enclosed in the next Section.

3.3. Safety net

A safety-net facility will be introduced for persons who are unable to keep pace with the digital developments. This is being introduced as there will always be a group that is unable to keep up with developments, not just in digital developments but also in comprehending their rights and obligations and who, consequently, need assistance to ensure

than they can comprehend their rights and obligations. The NTCA is cooperating with other government agencies and parties on this issue. The NTCA has for many years cooperated with other parties, for example, senior citizens' associations in collaborative arrangements for the provision of assistance to taxpayers in filing their income tax return. A network of service points has also been set up for assistance with Benefits. The NTCA also makes use of these networks in the provision of assistance to the non-self-sufficient. The Safety-net programme offers the non-self-sufficient in today's digital society various solutions based on a range of approaches – help in achieving self-sufficiency, social intermediaries, professional intermediaries and service counters. NTCA is cooperating in this programme with other service providers/administration agencies that are confronted with the same issue, for example municipalities and their service counters.

3.4. Legislation

Simple legislation makes an important contribution to the opportunities available for the digitisation and control of the administration processes. The NTCA works closely with the legislative directorates in the development of new regulations and the review of the workability and enforceability of new regulations.

3.5. Digital NTCA - internal

Appropriate digital support is also of essential importance to NTCA's staff. An improvement of the digital opportunities available to individuals and enterprises cannot be achieved without the improvement of the digital opportunities available to the staff.

During the coming years the facilities available for work independent of location, time, and equipment will be further increased. This can achieve substantial efficiency benefits to the primary process. The first step is the rollout of the NTCA's Digital Workplace, when the fixed PCs on the desks be replaced by laptops and, increasingly, by tablets.

The NTCA possesses a great deal of information, information that will need to be made more accessible. New sources of data will also need to be accessed to improve the NTCA's insight into individuals and enterprises, its information position. An appropriate information position serves as the basis for the implementation of the NTCA's compliance risk management strategy, the development of intelligence and the measurements of effects. In the absence of this information its staff will no longer be able to perform their work with the required degree

of quality. The information services chain provides the necessary facilities.

3.6. Data management

Data increasingly serve as the basis for the NTCA's actions, in its exchanges of information with individuals and enterprises, exchanges of information with other government agencies and in its deployment of compliance risk management strategy.

Some of these exchanges relate to the transfer of mass data on a large number of individuals and enterprises, and others to information about a specific individual citizen or a specific enterprise.

An appropriately designed data management system is of increasing importance to the NTCA's performance of its duties in the required manner. However, in practice achieving this is often anything but simple. Data management design also extends to the provision of assurances for the responsible use and responsible storage of data.

Consequently, the NTCA has a great deal of work to do. The work on these developments is being carried out by the information services chain, in cooperation with the Centre for Facilities Services and Central Records. The principles formulated for the iBelastingdienst project serve as the leitmotiv for the developments (more information about these principles is enclosed in a later section).

3.7. Rationalisation

The NTCA's information services landscape is still extremely complicated, both on the application and infrastructure sides. The available budgets are largely allocated to the maintenance of the existing systems, whilst investments in new systems are also necessary. It is clear that the NTCA will need to keep the existing systems in operation for many years to come. Nevertheless, it will also be necessary to take action to ensure that the maintenance of the existing systems does not increasingly restrict the scope available for the implementation of new systems.

For this reason the NTCA is drawing up options for the incremental simplification of the information services landscape on both the application and infrastructure sides ('rationalisation'). The development of new applications and the deployment of new technologies will be followed by the phase-out of the applications and technologies

they replace. Failure to do so will not result in the simplification of the information services landscape: it will only make it even more complex. Rationalisation needs to trigger a snowball effect in which reductions in the management costs create scope for the simplification and modernisation of the information services landscape that further reduces the management costs, etc. This will ultimately lay sustainable foundations for the improved digital support of both individuals and enterprises and the NTCA's staff.

4. THE DIGITAL NTCA – COMMUNICATION WITH INDIVIDUALS AND ENTERPRISES

The NTCA implemented electronic communication with individuals and businesses several years ago. This Section reviews the main developments and the next steps to be taken.

4.1. Pre-completed tax returns

The NTCA introduced pre-completed income tax returns in 2009. The NTCA completes some of the details in these tax returns and then posts them on its website one month prior to the tax return due date (1 April) ready for downloading by the taxpayers. The taxpayers check these details and supplement them as necessary. The NTCA has acquired more and more details for the pre-completed tax returns over the years.

In 2013, an external agency was commissioned for a survey of taxpayer experiences of and attitudes towards pre-completed tax returns. 51% of the respondents stated that they used the pre-completed tax return, a substantial increase from the percentage in the previous year (2012: 37 %). The respondents had extremely favourable experiences with the high quality and completeness of the details in the pre-completed tax returns.

The main reasons for their use of pre-completed tax returns are the convenience, speed and their favourable experiences in previous years. Nine out of ten users ranked the various elements of the pre-completed tax return involved in the tax return process as good to very good. The survey also interviewed taxpayers who had not used pre-completed tax returns for last year's tax return. 40% of the taxpayers who had not used pre-completed tax returns indicated that they probably would next year.

Almost all the taxpayers who had used pre-completed tax returns would use them again next year.

In 2013, 96% of taxpayers filed a digital income tax return. E-filing is voluntary for individuals, but mandatory for entrepreneurs.

4.2. App

The NTCA introduced the first tax return app in a trial that began this year. This first app, which was suitable solely for simple tax returns by taxpayers without an owner-occupied home or deductible items, offered a fully pre-completed tax return in which no details needed to be changed or supplemented. The app was downloaded more than 77 thousand times, and almost 17 thousand taxpayers ultimately filed their tax returns with the app. The NTCA will evaluate the trial and may expand its scope next year.

4.3. Pre-completed tax return facts and figures for 2013

About 7.6 million taxpayers receive a tax return letter 6.5 million are sent to individuals and 1.1 million to entrepreneurs.

More than 100 million details are pre-completed

The details entered in the pre-completed tax returns origin from:

- Schools, universities: 2 million study details
- Employers, pension funds, social benefit administration agencies: 22 million income details
- Banks: 60 million savings details
- Municipalities, banks 25 million valuation of immovable property and mortgage details
- Insurance companies: 650 thousand annuity policy details

All details are entered in the pre-completed tax returns sent to about 6 million taxpayers.

The pre-completed tax returns sent to other taxpayers already contain some or all of the details.

4.4. Standard business reporting

Standard Business Reporting (SBR) is a method for the compilation and submission of digital financial reports. These reports include, for example, tax returns filed to the NTCA, annual financial statements submitted to the Chamber of Commerce, credit reports to various banks and statistics reports to Netherlands Statistics.

SBR is based on the standardisation of data at source, i.e. the entrepreneur's financial records. SBR offers intermediaries and entrepreneurs a simple means of reusing data after using a standardised method to entering them just once in the business records.

SBR and the NTCA

The NTCA has participated in the development of SBR right from the very beginning, as standardisation is of great importance to the simplification and reduction of the administrative burden. The other players of the first hour were the Chamber of Commerce and Netherlands Statistics. The government parties' adoption of a serious approach to SBR resulted in private parties such as software developers and accountants also becoming interested in SBR. Other ministries and the parties in the housing and healthcare sector also affiliating with SBR. Delft University of Technology has now developed a Master's Degree Compliance Management study programme based on SBR issues.

In addition to the NTCA, the following parties are currently using SBR:

- Netherlands Statistics, for the submission of statistics reports
- The Chamber of Commerce, for the submission of annual financial statements
- Various banks, for the submission of credit reports

The NTCA is cooperating closely with other organisations on the further incremental introduction of SBR. The NTCA received 3.5 million SBR messages in 2013, and the number is estimated to increase to about 7 million in the current year. The use of SBR was prescribed for income tax and corporate income tax returns from the 2012 tax return year. The use of SBR was prescribed for both VAT returns and statements of intra-Community transactions as from 2014.

SBR's elements

- XBRL: the shared language for the definition of data
- Netherlands Taxonomy: the shared data dictionary to be used for various reports
- Digipoort: the digital link with the authorities offering a secure and reliable connection for the fulfilment of a range of reporting obligations

Benefits offered by SBR

SBR offers entrepreneurs and their intermediaries a number of benefits:

- alleviation of the administrative burden by the reduction of the reporting and administrative work
- increased efficiency: data is entered in the financial records just once and is then available for the submission of a range of reports to various agencies
- increased quality by the elimination of differences in interpretation: moreover, errors are identified early in the process and any errors can then be rectified in a standard manner
- SBR is a future-resilient approach for the message flows between the authorities and enterprises
- SBR is used on an international scale

Organisation of SBR

The Standard Business Reporting Programme partnership was formed to provide for the implementation of the SBR. Government and market parties participate in the SBR Programme which has the objective of simplifying the compilation and exchange of reports and financial reports. The market parties encompass entrepreneurs, software developers, accountants and intermediaries. The government's Logius organization directs the SBR programme and the management of the various SBR facilities such as Digipoort and Netherlands Taxonomy. The SBR Council gives strategic direction to public-private cooperation.

The SBR Steering Committee coordinates the activities of the government parties participating in the programme. Peter Field, the NTCA's Director-General, is the Chairman of both the SBR Council and SBR Steering Committee.

More information about the SBR is available via the following link:

<http://www.sbr-nl.nl/wat-is-sbr/international/>

4.5. Message box

The Netherlands has developed the MijnOverheid.nl ('My Government') portal for all government agencies. MijnOverheid includes the Message box that individuals can use to receive digital post from the authorities. In the coming years more members of the public will be encouraged to create a MijnOverheid account. The Government has set itself the following ambition: in 2017, the Dutch will not use any hard copies in their communications with the authorities.

The Message box, the personal e-mailbox for the authorities' electronic messages, is user-friendly, fast, secure and environmentally-friendly.

Individuals decide which government agency messages they wish to receive in their box and then no longer receive these messages by post. Individuals receive an e-mail notification for each new message in the box.

MijnOverheid is owned by the Ministry of the Interior and Kingdom Relations. This portal was introduced several years ago, and now needs an incentive for its increased use.

The NTCA is 'launching customer' and has taken the lead. Experience from earlier programmes has revealed that an increasing number of organisations become affiliated over the course of time. In addition to the NTCA, a variety of government agencies (including municipalities) now send their messages via the Message box. The number of government organisations that send messages via the Message box will increase rapidly in the coming years.

Logius and the NTCA, working in close cooperation, created 5.8 million MijnOverheid accounts for persons entitled to benefits in December 2013. Personal letters sent to the 5.8 million individuals entitled to benefits in January informed them that they were now able to examine the digital version of their benefit decision via the Mijnoverheid Message box.

The accounts were successfully used to issue decisions on the automatic continuation of benefits in 2014. The NTCA is expanding the number of decisions sent via the Message box to include tax decisions. These decisions are also issued in hard copy form.

More than 1 million accounts had been activated at the beginning of February 2014.

This scale-up will encourage other government parties to send more messages via the Message box.

The NTCA's decisions sent via the Message box are still accompanied by copies sent by post. In the longer term, the NTCA will switch solely to digital messages: the timing of this transition depends on factors including the number of activated accounts.

5. NEXT STEPS TOWARDS THE DIGITAL NTCA

5.1. Information services in 2017

Pursuant to the NTCA's mid-term plan, by 2017 the information services chain will exhibit the following important characteristics:

-
- The information services landscape is in order.
 - The information services are more agile and flexible.
 - Structural scope for innovation is available.
 - Support for the mass processes and for the NTCA staff optimises the continuity of the operations.
 - A number of major systems have been replaced.
 - Data are readily accessible for a wide range of use.
 - A security architecture has been implemented which is appropriate for the continuing digitalisation.
 - The NTCA has implemented an appropriate Digital Workspace for its staff.
 - Cooperation with the market and government parties has been further developed.

The NTCA's CIO adopts an annual agenda that specifies the manner in which all parties in the information services field are to achieve their business targets. This agenda is prepared in a process which involves all parties in the chain and parties outside the chain. Managers in the information services chain, other managers and experts in the relevant fields provide input for the agenda. In addition, other renowned market players have also provided valuable input and validated the concepts developed for the programme. The NTCA also intends to make regular use of external expertise of this nature, both in the provision of input and the validation. The CIO agenda will be reviewed at annual intervals on the basis of new developments.

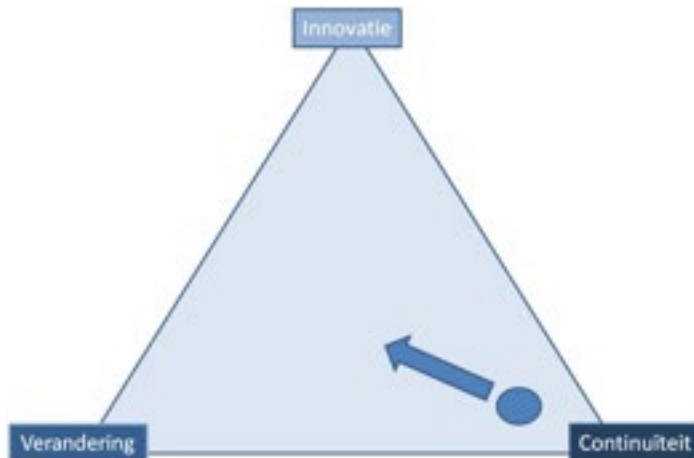
The CIO agenda specifies the NTCA's approach to the achievement of the agenda's targets. The most important elements are reviewed below.

5.2. Continuity and attention to change & innovation

During the past years, the theme for the information services chain has been the improvement of the continuity. This has resulted in a substantial reduction of the number of disruptions – an important gain for both individuals and enterprises and the NTCA. In addition, implementations including the Benefits system, Pre-completed tax return and various legislative programmes have been completed with success. At the same time, the NTCA has observed that the implementation of changes has proven difficult and that innovation has received limited attention. The NTCA will also need to continue to devote attention to the elimination of vulnerabilities in the information services chain.

The information services chain will always need to devote a substantial portion of its efforts to continuity and its optimisation. As such, this is

no more than logical: mass processes must be carried out without disruption and the NTCA's staff must be able to make day-to-day use of the available information services with the minimum of process interruptions. Errors must be eliminated and 'hassle' and irritation must be resolved whenever possible. In addition, the NTCA's ambition is to create more scope for change and innovation results. This direction is shown in the following diagram.



The NTCA intends to reduce the burden continuity imposes on its staff and resources. This will in the first instance focus on addressing the interactions between the architecture and infrastructure, and on the redundancy in the infrastructure, applications and processes.

Continuity is of great importance to the performance of the core duties of today. Change is necessary provide assurances for the NTCA's performance of the core duties of tomorrow.

A clear financial long-term framework and insight into the knowledge and capacity of supply and demand provide scope for change. The yields from more efficient operations will need to expand this scope within the near future. A prioritisation and selection process will then be required within the available scope that is compatible with the NTCA's strategic objectives and does justice to the responsibilities of the individual business units.

An increase in the effectiveness of the implementation will be needed to speed the achievement of results (increased output). An increase in effectiveness will also contribute to the scope, as less work will then be deferred.

Innovation involves examinations of new methods and technologies. These innovations can, for example, relate to new facilities for the staff, individuals or enterprises companies or for the information services chain as such. The long-term objective of innovation is to create scope and increase effectiveness. As a result, innovation is an ingredient required in preparing for the future. The limited capacity and finances for innovation justify the adoption of a structural approach. Direction of the initiatives and the innovation process is required.

This will clarify the NTCA's assessment of developments as promising or unpromising, and its actions on the basis of those assessments.

These innovations will relate to issues including the following:

- The provision of new information services facilities for the staff, individuals and enterprises citizens and company (incubators)
- The improvement of the work carried out on continuity
- The more effective implementation of change (such as reuse and the agile implementation of legislation)

5.3. Partnership

The additional attention to change and innovation requires a new approach to the work. More intensive cooperation is required if this transition is to be feasible. Everyone taking part in this cooperation has a personal contribution to make and can called to be account for their contribution, all with the ultimate result of a joint focus.

The cooperation is focused on three areas:

1. Cooperation within the NTCA

The information services chain is focused on the improvement of cooperation between the 'demand, supply and policy' sides of the triangle and between the parties in the information generation chain.

2. Cooperation within the government

The NTCA cooperates with government parties when this creates added value for the achievement of its strategic objectives. The Dutch NTCA can, depending on the importance to the Administration, assume a pioneering role in developments such as SBR and the Message box, in analogy with its earlier role in the development and implementation of the "DigiD" digital signature system adopted by all government agencies.

The NTCA plays an active role in cooperation within the government organisation.

16 national government agencies, including the NTCA, jointly form the Manifest Group. The Manifest Group meets once every 6 weeks. The Manifest Group devotes attention to the following issues:

- the improvement of the provision of services to persons who are unable to keep pace with the digitalisation of society;
- the improvement of the provision of personal services;
- the improvement of the provision of digital services;
- measures to combat fraud.

The first theme focuses on individuals who are unable to keep up with the digitalisation of society. The government organisations are jointly organising a catch net for this group of individuals which is based on the rapid resolution of specific problems encountered by these individuals.

The Manifest Group is also working on the improvement of the provision of digital services: the Group played a decisive role in the implementation of the Message box and is also involved in other digital developments, such as SBR and e-identification and e-authentication for use throughout the government organisation.

The Manifest Group, in conclusion, is also cooperating closely in joint measures to combat system fraud. Indications of fraud are shared and joint action is taken against fraud whenever possible.

3. Cooperation with the market

The NTCA makes optimum use of cooperation with the market, in a manner which is compatible with the situation and the strategic developments within the NTCA. The NTCA always gives consideration to the balance between the added value and the risks associated with cooperating with the market. During the coming years the NTCA will enhance relationship management, licence management and supplier management by means of increased cooperation between the organisational units that are involved.

5.4. Staff

The staffs are the most important 'resource' involved in the achievement of the targets. Their competences and their professionalism are of

essential importance to the success of the CIO's agenda. The NTCA intends to make maximum use of their available knowledge and competences.

As the information services chain is part of the NTCA organisation the generic HR objectives are also applicable to the links in the information services chain.

These then also extend to the leadership and LEAN programmes designed to ensure that staff and management discuss the content and the organisation of the work and develop steps for improvement.

In addition to these generic HR targets, the information services chain also needs to address specific issues and objectives. These relate to the knowledge of the staff and flexibility in their deployment.

- If there is any section that needs to invest in its staff's knowledge and professionalism, then it has to be the information services chain. Technological developments are being introduced at a rapid pace and, as a result, knowledge rapidly becomes outdated
- In addition, the information services chain has a need for an improved flexibility in the deployment of the staff. Priorities on the demand side can result in additional (temporary) pressure on some parts of the organisation (for example, specific B/CAO and/or B/CIE teams or a specific IM department). Other staff will then need to be called in to provide assistance.

The NTCA is taking the following actions:

- An inventory of the competences of the staff and the implementation of resource management
- An inventory of the developments in and outside the information services chain that are of importance to the staff required for and the staffing level of the information services chain, and to the individual members of staff.

This inventory also takes account of external issues such as developments in the labour market, sourcing and general government developments.

The results from the inventory will determine the required approach to the development of the staff and the staffing level, as well as the actions that will need to be taken.

OTHER INNOVATIONS IN THE USE OF ELECTRONIC SYSTEMS “MY CONTRIBUTIONS” SYSTEM

Angel Ruben Toninelli

General Director

Federal Administration of Public Revenues

(Argentina)

Contents: Summary. 1. Back ground. 1.1. Description. 1.2. Impact. 2. Possible adaptation by other tax administrations

SUMMARY

This system is a web-based application in real time, which allows workers to visualize the information submitted and payments made by their employers, in relation to all the social security resources components, in a simple and accessible way, with an intuitive indicator of compliance with the obligations.

Through the implementation of this system, workers can check online the information entered by their employers, contrasting it with their salary receipt and/or working documents. This way the worker has an active role, achieving:

- Control by opposition
- Encourage social responsibility or citizen watch.
- Increase the risk perception

It helps to avoid underreporting salaries or omissions that harm the worker's future benefits or the health and occupational hazards coverage.

This service is in process and is being permanently updated to incorporate new features and adapt to legislation changes.

1. BACK GROUND

Before the existence of this system, the worker access to this type of information was restricted, because to know their employment situation in relation to the social security resources payments, he had to travel to the State agencies central Offices during working hours to perform a cumbersome procedure and could only receive the information at a deferred date.

It was usual that workers would be ignoring the missing or lack of contributions on the company's payroll until the time of processing their pension benefits or when requesting any health or occupational hazard coverage, and at this time some of the companies in their job history had already ceased to operate, and therefore could not be objects of claims.

1.1. Description

Through this web application, salaried workers, as well as independent professionals and home workers (domestic service) can control in real time by internet connected device if they are regularly declared; they can check the contributions paid by their employers, verify the destination of the funds, can claim their rights privately (for the employer), and can rely on information since the implementation of the nominative affidavit in July 1994.

A simple language is used, with context-sensitive tips and mechanisms that allow a clear identification of the existing problems (a colored system similar to traffic lights, where green means good standing of payment, yellow partial payments and red indicates non-payment) and a display of information comparable to the monthly receipt that all workers must receive.

This way, the worker has an active role in the control of his employer (control by opposition); with as a consequence that previous situations of impunity come to light and that the workers' contributions cannot be withheld without their knowledge. Claims can be made immediately, avoiding problems at the time of processing the pension benefits.

Although we sought to protect sensitive information (such as salaries, company data, etc.) via a secure access through a "fiscal key" (easy to obtain at any office of the tax administration) or via online banking authentication (home-banking access), there also is a possibility of free access that only reports if the worker is declared and the social

security contributions are paid, allowing control even without obtaining the aforementioned key or in the absence of proof of delivery.

Using Internet allows reaching more and more workers, (given the growing penetration and territorial coverage of access services) as a channel of information that operates 24 hours a day, allowing the worker to perform queries from home or from any location and at any time

In addition, the launching of the system was accompanied with national advertising campaigns and training sessions with professional groups so that they could act as spreading agents, and support the most vulnerable and unprotected workers, as well as with a specific micro-site on the website of the Agency.

1.2. Impact

The main objective in the development of the system was to bring transparency and integrity to the processes of registration, collection and distribution of the tax administration revenue, so they can be compared to the workers' payroll receipts and social security obligations payments that their employer must make monthly.

This has also generated a control of employers and workers by opposition, showing via the web information that was difficult to obtain, resulting in an increase in the risk perception by the employer.

Even if it is a worker-oriented system, a sample of its effectiveness as a deterrent is the fact that companies carried out consultations to solve the problems they had in their records.

Finally, claims by workers can be privately submitted online through the "comments mailbox" that feeds a database used in research and control of employers.

Here are some of the achievements since the implementation of the system (it is important to take into account that registering to the application is not mandatory):

- More than 50 million entries have been made by the workers since the start of the system.
- There are more than 40,000 daily queries on average.

In summary, the application “Online contributions” constitutes a tool for workers by allowing them direct consultation of the information they have registered, as a reminder to the taxpayers that they cannot act with impunity and, finally, as a tool for the tax administration to generate risk profiles based on complaints by the workers.

2. POSSIBLE ADAPTATION BY OTHER TAX ADMINISTRATIONS

The Federal Administration of public income (AFIP) of Argentina operates under a “single agency” scheme which allows effective and efficient management of information in a centralized way, that takes care of the information registration processes, collection (collection and registry) and distribution of relevant data and funds to all the social security stakeholders (public and private). Any tax administration can implement this system, taking into account that the benefits of a ‘single agency’ in the management of information also can be accomplished through inter-agency cooperation agreements, without any loss of power for the different actors involved.

At the same time, due to the reduction in cost of the equipment required for the management of information (servers, databases, etc.) and the generalization of internet access, the project cost is greatly reduced, offering the service at national level without increasing the number of customer service facilities or the office staff.

TOPIC 2

INFORMATION AND COMMUNICATION TECHNOLOGIES FOR PROVIDING TAXPAYER SERVICES

INFORMATION AND COMMUNICATION TECHNOLOGIES AT THE SERVICE OF THE TAXPAYER

Santiago Menéndez Menéndez
General Director
State Agency of Tax Administration
(Spain)

***Contents:** Introduction. 1. Short history of ICTs at AEAT. 2. Quality of Information. 3. Electronic filing. Their origin. 4. Generalization of e-filing to all taxes. 5. Innovation in the definition of electronic procedures. 6. The management of income tax. The income tax draft. 7. From the qualitative to the quantitative. Policies for increasing use. 8. Certification and information to other government agencies. 9. Electronic auctions. 10. Flexibility in the management of certain complex procedures: Deferrals. 11. The electronic notification as an innovation in the communication between administration and taxpayer. 12. An organization in permanent improvement. 13. Conclusions.*

INTRODUCTION

Since its inception, The Spanish Tax Agency has always used the latest information and communication technologies (ICT) as a strategic tool for both taxpayer assistance and for detecting and fighting tax fraud.

The present paper describes the historical evolution of the assistance services provided by the Tax Agency, mentioning some of the key decisions that have been taken over the years to reach the present situation, where internet is the priority channel (already exclusive in many cases, as we shall see) for the communication with the taxpayers, especially focused on assisting taxpayers to comply with all the obligations that tax administrations require from them, with the least administrative burden.

In Tax Administrations, few improvements result from of a concrete and specific action. They are, in general, the product of an ongoing process of improvement, a strategy which endures over the years, exercised with leadership and internalized throughout the whole organization, at a service to society.

This historical analysis from is not to satisfy nostalgic feelings but because many of the strategic decisions taken at the time are still valid today, showing an example how solid and simple solutions endure over time. Of course, all these decisions are implemented in their temporal context, including the idiosyncrasies of the country, its citizens' capabilities, the administration's resources, technical and communication infrastructure available, internet penetration and cost, etc.

1. SHORT HISTORY OF ICTS AT AEAT

Since its beginnings, the Spanish tax management system was heavily computerized. This is because the tax administration created after the return of democracy was small with respect to the surrounding countries (it still is today) and based its operation on contrasting information provided by third party sources to achieve the generalization of the tax return, especially the individual income tax (PIT), which was submitted by only a minority of the population before. For the same reason, from its origins it has invested consistent resources of all types (human, organizational, technological) to develop support tools and assist taxpayers to meet their obligations and reduce administrative burdens. What was called "New Tax Management Process" (NPGT) was developed at this time, where all basic processes and information flows between taxpayers and economic, financial institutions, Bank of Spain and Tax Administration were defined, with updates but only slight changes on the main processes, is still in force today.



This ICT-based operation model of the AEAT is recognized in both the strategy and in the organizational structure. A Tax Computer Department (DIT) has always been part of the Executive Council, bringing added value and proposing solutions to problems, situations and improvements, which are constantly arising in a tax administration.

In addition we have also been taking strategic decisions to progress in delivering personalized services: integration of most advanced technologies, using industry market standards, centralized databases, cooperative relationship with other governments and institutions, etc. The Agency has been committed to a comprehensive and connected view of information systems and databases. Faced with technological islands, isolated systems or non-coordinated data, the AEAT information system has adopted a comprehensive vision: To manages all taxes and all stages of the proceedings and integrate all data from a taxpayer whatever their origin (submitted, assigned, and generated by the organization itself ...) in a comprehensive consultation. If we were to select, among the thousands of system options, reflecting the integration over this goal, this choice of consulting the taxpayer would be our trademark: more than 150 different possible concepts associated to a taxpayer that can be displayed in real time on the last 10 calendar years. These strategic decisions, and others that will be in this study, are at the core of the Agency and of all public employees who are part of it

2. QUALITY OF INFORMATION

The information is the ground on which the AEAT information system is based. The quality of the information integrated to the system is the foundation that allows assistance and control; their management and continuous improvement are one of the most critical system processes. An error in one of the millions of records that are processed can lead to a management problem, especially when the operation is essentially automated. Even before internet, the information was already automatically processed, especially millions of records from third parties, through collaboration with external stakeholders (financial institutions, managers and social partners, other government agencies, etc. . .).



In 1995, after a period of deep analysis on its implications, the AEAT began to develop an enormous strategic project: the centralization of databases and information systems, previously distributed in 56 provincial data bases (BDP) used for the areas of management and collection, which were used mostly for control. This process, which was developed over nearly a decade, involved reprogramming over 40 million lines of code and thousands of software programs to avoid the fragmentation of information, and this led to the current Consolidated Database (CDB) that has allowed a qualitative leap in the possibilities of assisting the taxpayers, especially with the coming of internet.



To facilitate the completion of the taxpayers and improve the quality of input to the information system, since 1991 assistance programs (PADREs in Spanish) were developed based on personal computers which were always widely accepted by taxpayers as shown by periodic independent surveys (CIS, IEF, AEVAL). Aid programs, in addition to facilitating compliance, are also an essential component to administration: they allow controlling and improving the quality of the input information to the system. And it is well known that the cost of correcting an error in the data is multiplied by 10 when not detected in these phases in and goes into the core of the corporate information system.

Over thirty different information returns containing altogether about 1,000 million records from third party information are currently managed, allowing quantitatively understand the importance of this process in the system. Third party information is used in multiple areas of the organization, whether for assistance to the taxpayers (e.g. draft income) to control functions (checking tax returns or selecting taxpayers for inspection) or cooperation with other administrations (sharing information to prevent fraud made possible by the fragmentation of information, or to avoid requesting from taxpayers documents which are already held by other administration).

This, needless to say, is performed in accordance with the General Tax Code, since the taxpayers' information receive special protection in our legal system.



3. ELECTRONIC FILING. THEIR ORIGIN

In 1996, when internet was appearing, AEAT developed a virtual page where all available information was published and could be downloaded and, since 1997. All help programs which until then had to be distributed in a costly, time consuming and risky process of recording and distribution have been updated and from the start the possibilities to reach taxpayers directly and in real time were exploited. The possibilities of internet allowed minimizing one of the biggest risks that management had faced with all the prerecorded media: the inability to correct any errors detected later distribution.

During the second half of 1998, the Tax Agency developed a pioneering technology project. Big Businesses, those invoicing over 6 million per year (1,000 million pesetas before the single currency) could make their monthly VAT declarations and withholding their workers voluntarily, using internet. It was the first significant experience in the field of telematics submission to AEAT, possibly worldwide, when neither law nor advanced electronic signature infrastructure existed in Spain.



At this time, in the absence of internet electronic certificates and electronic signature to ensure the authentication of companies, a code called NRC (Complete Reference Number) was used, provided by financial institutions after the payment of each tax. This code was made by applying a certain data entry operation of a DES algorithm

(Data Encryption Standard) of the MAC (Message Authentication Code) function with a key assigned by the AEAT to each financial institution.

It is one of the examples of special collaborative relationship of mutual trust that the tax agency has with many institutions, especially financial institutions as partners in tax management. It is also an example of innovative spirit, but with the prudence that characterizes tax administrations in each step they are taking.

In January 1999, the pilot experience became final. Since then more than 22,000 large companies have submitted 600,000 monthly statements year-round, exclusively using internet. Like all the progresses being made, this obligation was not exempt from controversy in its beginnings, but it was a calculated decision: In addition to providing a modernizing incentive to companies, there were also evident benefits for the Administration.

These firms represented 1% of the total, but accounted collectively for 70 % of the estimated tax revenues. The importance of this group in the direction of the country is undeniable, both statistically and from a macroeconomic and budgetary control perspective justifying this special treatment. One day the deadline for making these statements, valuable and comprehensive economic information on the evolution of businesses and the economy in the previous month was made available, when previously almost two months were needed to record and process information (and of much lower quality). Today, every country in the world considers these obligations for their large corporations.

First PIT submission

In May of the same year 1999, the personal income tax for individuals was allowed via internet, on a voluntary basis, and using FNMT digital certificates for user and electronic signature (the National Coin and Stamp Factory was the first institution that provided certification services and electronic signatures in Spain through the CERES project). From 21,000 taxpayers who reported their income tax that year, the number has risen to more than 12 million last year (a figure largely overcome in the current season); this has taken a giant leap in improving the administration- taxpayer relationship management , which is be discussed in this article.

At that time, a general payment gateway was also developed in collaboration with financial institutions, which allowed performing any type of electronic tax payment via any financial institution which could join this process.

Although it seems prehistory, we are talking about a little over a decade, and as has been said in the introduction, we have tried to deal this topic with a certain extent, because many of the mentioned steps still constitute today the basis on which most of the electronic filing systems operate.



4. GENERALIZATION OF E-FILING TO ALL TAXES

The monthly submissions by large companies and annual income tax submissions were followed by annual submission of assets for societies and quarterly returns for SMEs, as well as the informative reports (as already mentioned, those submitted by businesses with third party data, currently about 1,000 million records in total) in a process that in the following years led the Spanish tax authorities to develop an information system able to manage online all types of tax returns.

Progressively over 200 different tax models have been integrated (available in online statistics), while the virtual office was developed, which currently includes exactly 2,976 options, 1,771 procedures and 656 procedures and / or services that may be used by taxpayers. This figure, as you can imagine, will have already changed since the moment it was registered here.

The virtual office has continued in a permanent evolution, as they were incorporating more services, it was necessary to increase their management and organization. Managing tens of options is different from managing a few thousand so it has been necessary to evolve from short descriptions to the organization of homogeneous groups, structured according to the user profiles and the types of taxpayers, and the emergence of the electronic office in late 2009, since the Law 11/2007 on electronic access of citizens to public services in Spain established that the electronic relationship was not a mere possibility of administrations to increase efficiency, but a basic right of citizens and businesses.

The work done by these early years has been a quantum leap in the services provided through the Tax Agency Website. The Tax Agency first developed the basic services, which allow reducing administrative burdens for the taxpayer, then added the partners associated in the integrated management of taxes, those who have more influence on the ordinary citizen and the company, and later associated the collection (especially the debt management and collection) and finally those determined by the inspection itself (such as tax complaint or electronic invoicing).



Thus, it has evolved from a mere presentation to developing the concept of integrated management of taxes. As an example, there are currently thirty online services related to the telematic income tax management tax and various campaigns are organized in specialized portals so the taxpayer will group all options he may need, both for information and for the processing. Everything that can be done face to face must be possible electronically.

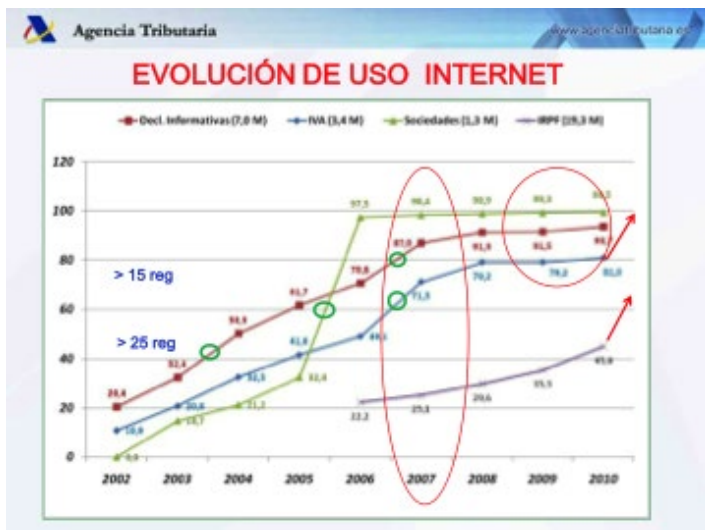
All these electronic processes are supported by a very powerful information system whose fundamental characteristics have remained the same in the past ten years (of course, capacity, speed and use has been in exponential increases in some cases, such as storage), since at the end, e-Government is the evolution of what has always been an efficient management of technologies that have existed in all times. And it is fair to mention that it was mostly directed and developed by the internal staff of the Computer Department of the Agency, a Department that integrates both technical staff and ICT Tax Experts, so that, in a natural way, a transfer of knowledge takes place between the two groups that are part of the same teams. The full involvement of a legal service that has been able to innovate in the regulations is also to note, providing essential legal support to what was reasonable and technically feasible.

It is not the purpose of this paper to present an exhaustive list of the implemented options; it suffices to say that everything which was handled in person can be made from the electronic office. The basic services provided from the Tax Office website include, among others:

- Filing returns
- Payment Taxes
- Telematic Notifications
- Telematic Registration
- Checking process status / refunds processes
- Obtaining Certificates
- submitting appeals
- Requesting postponement
- Census of taxpayers and obligations
- Change of legal address
- Request for an appointment
- Request for tax data
- Communication in case of disagreement with imputed data
- Consultation outstanding debts
- Regular consultation obligations.
- Supplies information to other government agencies
- Taxpayers' participatory mechanisms
- Consultation legislation
- Reports (tax queries)
- Assistance Programs
- Registration of powers of attorneys
- Mobile Portal
- Tax Agency Apps
- Specific Customs Portal
- Etc.

All these services are supported by citizens and businesses (also refer to on- line statistics from the central offices) and we need to involve them in their definition and improvement, both through formal groups (large corporations and tax professionals forums) and telematics options from electronics headquarters where you can comment on the quality of the existing service and suggest improvement (or register complaints). Some of the new options have been developed or improved precisely from these opinions from citizen and business representatives.

In this regard, a notice to users: the citizen is increasingly more demanding the public administration to the point that a greater quantity and better quality of services does not represent a substantial improvement in their subjective evaluation by taxpayers. The expectations are always growing, in all walks of life, but especially in e-government, where stopping is the same as going backwards.



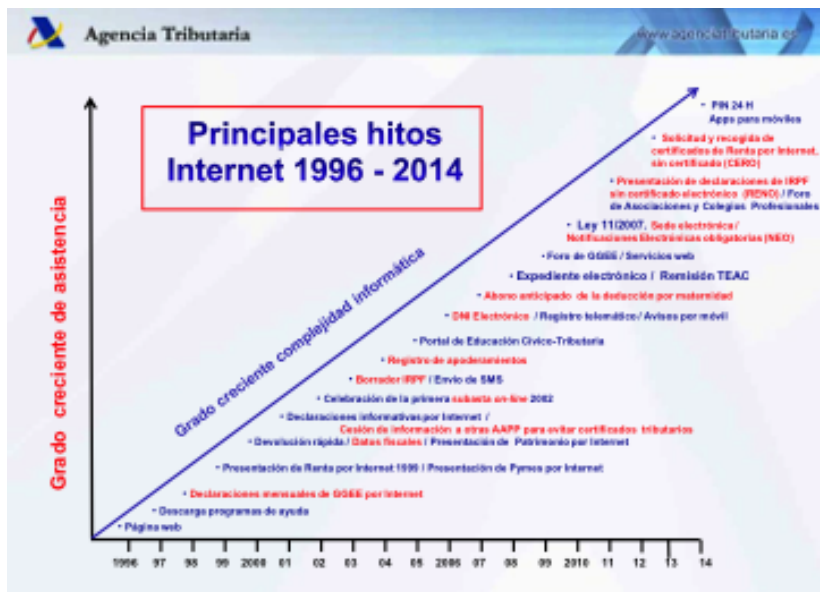
To implement the electronic identification of individuals and legal entities, to make possible the electronic filing of any tax return, to allow electronic payment by debit or credit card use, with the implementation of telematics notification through the E-Mail Enabled (DEH) and telematic registers that allow sending of any document from the citizen to the Administration through the network, all these elements close the cycle of basic facilities needed to consider the e-tax administration as almost complete. Basically you can submit, pay, check the processing status, claim, submit additional information and make any communication or notification of all taxes and fees. From the internal point of view, the procedure entry is an electronic document and no paper has pushed the massive development

of the electronic file and scanning the entry of all the documentation that comes in the face administrative records, so it has greatly reduced the management role in the Spanish tax administration. Neither paper nor money is handled: information is at the core of the management.

5. INNOVATION IN THE DEFINITION OF ELECTRONIC PROCEDURES

Innovation is not moving to internet the procedures that existed in face-to-face meetings; the technology allows doing things differently, in a better, simpler and more flexible way. This requires applying the concept of “Rethinking e-Government services” from the classic OECD study to simplify (process reengineering) and apply the technological possibilities to the mutual benefit of the administration and the taxpayer.

Clear examples of how the internet can do things differently, innovate in the delivery of public services lie in the mechanism that allow the draft return management , electronic reporting and daily management applications for deferral in times of crisis , online auctions or exchange of information between public administrations to prevent the citizen from having to move . Or the integration of mobile phones and web services. Some of them will be developed with a little more detail in the following article. The following figure shows the major milestones in the development of Internet especially in the last decade:



6. THE MANAGEMENT OF INCOME TAX. THE INCOME TAX DRAFT

The income tax return is the procedure that affects the highest number of citizens in the country. Each year, about 20 million returns are completed, and an even greater number of citizens are affected since individual statements coexist with joint family statements.

To control the correct income tax return in the PIT, tax data obtained from third parties have always been used. Constantly improving their information quality has allowed an evolution of their use, from a central control perspective to one of assistance, such as:

- System query for signs of non-compliance
- Automatic controls of the income tax return
- Sending tax data directly to tax payers
- Sending draft income tax from the tax data to be confirmed or modified by taxpayers.

This evolution in the use of third party information has been significant from the perspective of internal and external cultural change (from data as a “threat “ to data as an aid in an important process of information transparency), and the draft income tax and data services have become appreciated by the general population, which can now manage income tax with a simple confirmation in many cases, through a variety of channels (in person, by phone , internet, automatic telephone system, SMS , etc.)

The comprehensive internet management of the income tax draft has also allowed a substantial reduction in the refund process time (which can be of three days), including controls and prior controls, earlier campaigns for tax deadlines (they starts almost a month before), a decrease of resources used by tax administrations and a lower level of discrepancies in ex post controls of returns.



It has also allowed a significant reduction in campaign costs. As the penetration of Internet usage in society increases, the need to distribute assistance information decreases since it is easier to find it online; the citizens are consulting and downloading the information themselves and this way they avoid the mailing of tax data. To get an idea of the change occurred, in 2010 more than 18 million drafts and tax data have been printed and sent to the taxpayers' addresses, but this year we expect to send only 5 million. In 2013 more than 12 million tax returns were submitted online (63% of the total, which gives an idea of the dimensions of the campaign). This change has reduced by 50 % the cost of the campaign, while its parameters of efficiency have improved.

Implementing correctly the ICT possibilities means a better service to taxpayers and considerable savings for the administration.

ENCUESTAS DEL BARÓMETRO FISCAL

TABLA 3.4
VALORACIÓN DE DIFERENTES SERVICIOS OFRECIDOS POR LA AGENCIA TRIBUTARIA

	(%) Muy malo+ Malo	(%) Muy bueno+ Bueno	(%) No conoce/ No usa	(%) N/A/Mc
Borrador del IRPF	10,9	70,4	12,3	6,4
Comunicación de datos fiscales	7,7	75,3	11,1	5,9
Núm. de teléfono atención al contribuyente	14,7	50,7	26,4	8,2
Atención presencial en oficinas AEAT	12	62	19,6	6,4
Página web de la AEAT	4,2	39,2	48,4	10,2
Firma electrónica	3,8	30,1	54,8	11,4

Comunicación de datos fiscales y envío del borrador

7. FROM THE QUALITATIVE TO THE QUANTITATIVE. POLICIES FOR INCREASING USE

The effort spent by the Tax Office to fulfill the Law 11 /2007 (everything must be on the internet, not only the most important) and the arrival of the economic crisis (which brings the necessity of austerity in Public Administrations, lower budget and reduce the effective replacement rate) made necessary to accelerate the process of digitization of the society and the shift from face to face interview to online or telephone procedures

If, before the crisis, the qualitative aspect prevailed (Law 11/2007 “ of rights “ is an example), now the quantitative priority is the rule (“doing more with less”). The savings are not obtained by the mere availability of electronic services, but their efficient and massive use by citizens and businesses. Spain had historically been among the most advanced countries in the EU in the development of e-government, but below average in the use of services.

In 2010 certain stagnation was observed again in the use of internet in recent years; at least it was not growing at the rate expected and needed to maintain the quality of public services in the new conditions of austerity. For this reason the Agency keeps developing a strategy already previously started: Giving priority to the internet channel.

This strategy integrates a number of different options with the same common goal:

- Reviewing and simplifying of authentication systems using internet options, applying the principle of proportionality from Law 11 /2007: not all services require a maximum level of security with advanced electronic signature and other systems with simple signature that does not involve barriers for taxpayers may be used.
- Promotion of social partnership, professionals groups who can file tax returns for taxpayers in a special presumptive regime, based on mutual trust (more than 60 % of total returns are submitted by authorized third parties)
- Promotion of specific options of citizens and businesses powers of attorneys and delegations, allowing, for example, parents to authorize their children so that they can sign their returns.
- Promotion of assistance and telephone service instead of face -to-face relationship
- Inclusion in the annual plan of organizational goals that are measured monthly, and the results of which is a condition for economic incentives.

- Collaboration with other public bodies for electronic exchange of information to avoid face to face meetings, reducing administrative burdens on taxpayers (e.g. tax certificates)
- Promotion of policies to compel certain groups to use e-filing, including notification.

One of the problems identified as an obstacle to the use of e-services by citizens is some taxpayers' difficulty in the use of advanced electronic signatures. To overcome this barrier, different systems have already been used, but now it has been decided to unify all of them under a specific government reform action plan: "Unification and simplification of non-advanced identification and authentication systems," by the establishment of a system called "24 hours PIN", which is developed and implemented by the Tax Office, but will be extended to other administrations once its efficiency will be demonstrated.



The Agency implemented this system, along with the mandatory use of internet for the 2013 annual VAT return submitted in January 2014. More than 3.4 million VAT returns were submitted, of which approximately 180,000 were made with the new system, which will be valid for the income tax campaign.

The experience of the annual VAT can help us to make some reflections on the mandatory electronic relationship policies: the administration has to push for legal modifications to compel those groups which have sufficient capacities, even some minor complaints or rejections

will always remain, and it is necessary to assume them (it has been so since the 1998 experience with large companies) ; we should be sensitive to the groups that have a problem (not falling into the digital gap) offering support and alternative care when necessary (usually only occurs in the first year) .

This type of experience by the Tax Agency is particularly significant, and over the years many of the advances , especially for businesses, have come from the hand of the obligations for certain groups until reaching, over a decade, virtually all obligation for all statements , except in the case of individual income tax. The taxpayer is always grateful for the electronic option, and the final closing of other channels allows to free resources available to develop other tools of support.

This balance between support and obligation has been permanent over the years and has allowed the leap in the level of use, with a major side effect for the country reflected in all international reports: It is a push to modernize enterprises, mostly SMEs, to improve their skills and digital culture, which result increased productivity and competitiveness, placing them in a position which facilitate the necessary internationalization of their activities. This role of the Tax Agency in the modernization and training of the society as a whole is not rhetorical, but real, and is reflected in the extraordinary correlation between the decisions taken and the electronic services statistics and electronic signatures periodically published by Eurostat, where, for the first time, Spain has surpassed the European average in the overall use of e-government.

8. CERTIFICATION AND INFORMATION TO OTHER GOVERNMENT AGENCIES

In Spain it is increasingly common to request a certificate of good tax standing to obtain public help, grants, access to public services or even classification for payment in the provision of public services or for the purchase of drugs.

Although the law (several regulations) allows citizens to avoid having to produce documents already held by other public administrations, the reality is that they are still massively requested. This system not only cause problems and administrative burdens to citizens, but considerably increases the administrations' workload with millions of requests for certificates.

Although the ability to request and obtain online certificates exist since 2002 , it was not used by the overall population , so it was a major workload in the agency's offices, forcing to use personal in an activity that did not bring any added value to the organization .

In 2002 a project was launched to provide direct information to the government agencies needing tax information. Slowly at first, and then more intensely, the other agencies are changing their procedures and forms, and request citizens to authorize the transmission of personal data (protected by the law of personnel data and the General Tax Law).



Currently a complex exchange system uses multiple channels (secure email, single access with form, internet files, web services) avoiding in 95 % of cases the need for citizens to visit the Agency's administrations to request certificates. This result in having 450 agents released nationwide from working on this service (assistance to Taxpayers), so they can be affected to other high added value tasks for the organization (e.g. the control area). The advantages of the system are evident, including some instances of fraud that were detected with paper certificates.

This project has received the first prize of the European Commission as the best electronic cooperation service between government agencies in 2003.

9. ELECTRONIC AUCTIONS

The Spanish tax authorities may sell the property of debtors and auction them to collect outstanding debts. This classic process performed in an auction was suffering from a number of drawbacks that affected

the collection process. The fact that the auction was at a particular location decreased knowledge and competition between buyers. At the same time this favored a clear distortion of the system with the presence of some auction professionals that often kept agreements between them, on the verge of illegality and, in any event, this affected the revenue objectives of the administration.

The development of a new auction procedure where users can participate simultaneously in person and via the Internet has substantially increased the advertising, competition and transparency of the process and, therefore substantially increased revenue by reducing the distortion generated by the auctioneers.

Of course this process has been made possible by the implementation of telematics options for the deposit of guarantees, participation and bids in the auction, the auction's final price, etc.



10. FLEXIBILITY IN THE MANAGEMENT OF CERTAIN COMPLEX PROCEDURES: DEFERRALS

The economic crisis in Spain has had, as it is well known, very negative effects on employment and survival of enterprises, especially SMEs.

The difficulty of meeting payment obligations have been very high and therefore, the requests for deferrals have increased fivefold during the crisis. On many occasions, the government agencies themselves contracted debts with companies that threatened their survival. The

Government, in one of the most courageous steps at the start of its term, has created a specific and direct fund to pay suppliers and companies, for all outstanding debts of regional and local governments, developing a direct payment mechanism to companies by bypassing the debtor administrations. The payment mechanism was commissioned by the government directly to the Tax Agency, realizing that its technological development would allow it to successfully manage the project.

Regarding deferrals, in 2007 about 470,000 of them were requested, while in 2013 more than two million have been requested. The resolution of deferrals is a special collection procedure with a specific management, which was not sufficiently efficient to give a quick response due to this increase (especially with no additional or even fewer human resources). The Agency was challenged to drastically reduce the resolution time for the benefit of distressed companies, and once again an important part of the solution came from the technology and innovation management:

- Highest level of electronic filing
- Mechanisms for automated risk assessment of the application
- Automated Administrative actions that allow administrative decisions (final decision making) based on the application of a system of information without the need for direct intervention of any administration official.

The strict compliance with the respective regulation, applying criteria of flexibility and ease of processing have enabled to provide companies with every possible help to solve their temporary cash flow problems.



11. THE ELECTRONIC NOTIFICATION AS AN INNOVATION IN THE COMMUNICATION BETWEEN ADMINISTRATION AND TAXPAYER

The Electronic notification is providing a new impetus to the development of e-government to complete the removal of the paper form between individuals, companies and public administrations. Until then, the relationship was electronic up to the point when in the administration had to be in formal communication with the taxpayer, where we came back to the classical world of paper, certified notification and a person was sent to the legal address for the handwritten signature of the notification.

Its advantages may involve: improving the effectiveness of the notification, reduced processing times, modernization of companies, environmental improvement, increased debt collection, decreased fraud inherent to those taxpayers whose objective was not to be notified, etc. This represents an important direct savings for the AEAT, currently estimated at EUR 25 million.

The Spanish administration has developed a common notification system called Enabled E-mail notification (DEH). This system has the advantage (not a simple email, but a centralized system accessed through a certificate and electronic signature and which records access, rejections and acceptances of notifications with complete legal security) that it can be used by all agencies of the country and thus, the company also can access all of them from a single point.



After reaching technological maturity of companies (all of them have many obligations and must submit them online only), the Agency has taken a new step, imposing the electronic notification, in a progressive process

which took over two years, affecting currently two million of companies (this number was reached by the end of April 2014) and more than 20 million notices and communications have been sent in the past two years.

The technological process has also allowed innovation in the delivery of this procedure for the benefit of taxpayers. In the classic paper notice to the taxpayer, there was a month of notification time. The justification was the possible holidays of the taxpayer, the lack of means of the administration, etc. This problem does not exist with electronic notification.



Suggestions from taxpayers and groups in improving the service have made possible to analyze and approve a legislation that allows taxpayers to keep the 30 days of discounted time. The calculation of terms is the ultimate goal, since the notification is transmitted in real time to the mailbox and can be collected at any time. These are new ways of doing things: with participation, innovation and technology (and a bit of imagination and courage, of course).

12. AN ORGANIZATION IN PERMANENT IMPROVEMENT

So far we have presented a series of strategies that have allowed the Tax Office to develop a complete system to assist taxpayers with the use of ICT and the internet.

However, when it might seem that we have reached the finish line, the reality is that technology represents a permanent challenge for

organizations because there are always new elements for improving the effectiveness and internal efficiency, adaptation to the needs of taxpayers or improved political communication and participation. Or new form of relationship where communication will be more between machines and information systems than between people, especially when we refer to large organizations, the so-called “internet of things” applied to public services. Among the many projects currently initiated are the followings:

- The use of smartphone as the preferred channel by young people, with the development of options and specific apps, such as the automatic reading of QR codes that automatically connect to the corporate applications they serve. It is important because the management should adapt to society and to the massive use of these devices among young people (future taxpayers).
- Intensive use of web services for communication between institutions. In the future, there must be automatic communication between information systems, and not only between a person and a system, as requested by large companies that perform hundreds, perhaps thousands of tax returns via internet nationwide.
- The development of new tools based on data mining and processing of large volumes of data in the fight against tax fraud, because internet and the e-commerce also increases fraud areas, which the new Tax Control Plan intends to fight.
- The inclusion, increasingly necessary, of elements of open government in all public administration website options that implement greater transparency (At the end of this year, a new law will enter into force on transparency and access to public information and good government), participation (including the integration of the elements that may be of interest in social networks) and cooperation.
- Progresses in the current possibilities of electronic signature, with the inclusion of new techniques such as biometrics in administrations, to complete the removal of paper forms in face-to face relationships.



And of course the alignment to government policies, which next year may bring us legislative changes in tax matters, such as a new income tax, or implementing the reform plan approved by the Commission for the Public Administration Reform (CORA) where the Agency has taken a leading role, providing common services to other authorities in order to increase the overall efficiency of the administration.

13. CONCLUSIONS

The tax digitalization process of the Tax Agency has been the result of continued teamwork throughout the organization, with a clear and firm strategy, with specifics and measurable objectives and supported with a comprehensive and robust information system.

When taxpayers, both businesses and individuals, are asked which assistance services they consider most useful, they choose the tools that allow them a simple and direct interaction, from anywhere, at any time: the internet services. In addition, companies consider administrative burdens not with respect to an isolated administration, but with respect to all public authorities which require information. For these reasons, in a decentralized country as Spain is today, the development of e-government and cooperation between different levels of government on behalf of taxpayers becomes more and more important. This is precisely the priority of the Tax Agency in recent years.

In a recent OECD report, which analyzes the reform process of the Spanish government (“ Spain: From administrative reform to continuous improvement “) the leading role of the Tax Agency for its strategy in the development of e-services is highlighted and selected as an example for other public administrations. This is an honor for the organization and all its agents.

In the taxpayer service provided by the electronic administration, having been successful so far is not a guarantee of success in the future, so it is necessary to maintain this permanent, imaginative and innovative effort in the development of all kinds of improvements to make life easier for taxpayers, whether individuals or legal entities, and reduce administrative burdens.

INNOVATIONS IN TAX ADMINISTRATION UTILIZING MOBILE PLATFORM

Pablo Ferreri

General Director of Revenue
(Uruguay)

Contents: Executive summary 1. Introduction. 2. Services strategy. 3. ICTs in Uruguay. 4. Mobile solutions. 5. Conclusions.

EXECUTIVE SUMMARY

For several decades, information technologies and communications (ICTs) are key tools in the actions of tax administrations.

Due to the vertiginous changes in available technologies, tax administrations need to constantly review the characteristics and conditions of the services they provide, to establish new strategic guidelines for the design and implementation of a multichannel services model which enable to create, re-design and innovate, facilitating interaction with taxpayers and citizens in general by maintaining a balance between the application of the rules, operational efficiency and the physical and logical security of the technology that supports the model.

In this context, mobile phones have become the most rapidly adopted technology in history as well as the most popular and widespread personal technology in the world.

The smart devices features as well as high levels of interoperability of mobile applications allow quick access to the information available and the provision of a new generation of services enhancing the capacity of tax administrations to meet the specific needs of citizens.

1. INTRODUCTION

The social and technological environment is changing faster than in previous years; therefore it is important to improve our capacity to

predict them correctly and at an early stage, in order to respond to these challenges which tax administrations are facing.

Both public and private organizations must adapt to this changing environment and adjust these processes for carrying out functions in an efficient and effective manner.

The Tax General Directorate (DGI), as well as the other tax administrations in the world, needs to constantly readjust their services for successfully meeting their goals.

The growing mobile technologies requires reviewing the work processes, because the world is changing, people and businesses are much more sophisticated, complex, interconnected, this is one of the reason why taxpayers have special requests and needs; There are also new risk areas that need to be detected in order to minimize tax evasion and tax crimes.

To provide a better answer for this reality, so different from a decade ago, this situation should not be considered as a threat but as an opportunity to organize ourselves in a different way, to rethink how services are provided and change the way administration officials relate to citizens and taxpayers.

2. SERVICES STRATEGY

Since 2003, the General Tax Directorate (DGI) is in transformation processes, which develop different activities for improving their internal processes, offering services that meet the permanent and changing needs of taxpayers and citizen in general.

Given the constant changes in technologies, it is necessary to review the characteristics and conditions of the services provided; by establish strategic guidelines for designing and implementing a multi-channel customer service model. It is necessary to create, re-use and innovate, to interact with various recipients with a balance between the enforcement of the laws, the operational efficiency as well as the technological security supporting the model.

One of the main pillars of the current administration is to contribute to the country's economic development and e-Government. The DGI focuses on technological innovation for helping the economic and social development of the country by optimizing revenue and providing technology tools so that individuals and businesses meet their professional goals.

For the country's modernization process, the development of the Electronic Government and Information Society Agency (AGESIC) project, which is supervised by the Presidency of the Republic, aims to regulate the use of ICTs for public services.

In this context, the Tax General Directorate has aligned its technological and strategic objectives to the electronic government projects included in the "2011-2015 Digital Agenda" developed by the AGESIC agency supervised by the Presidency of the Republic.

The Digital Agenda is a dynamic mapping process to better and more efficiently coordinate the Information and Communication Technologies (ICT) programs regarding the activities carried out by citizens, businesses and the Government. It aims to adjust the Information and Communication Technologies to the national objectives and principles which are observed and enforced by the DGI technological services which are available to taxpayers.

The Agenda strategic objectives are as follows:

- Universal access to broadband
- Development of ICT for Education - Plan Ceibal
- To develop the digital skills for citizens.
- Electronic access to the public administration as a civil right
- The Integration of the State
- Development of e-Commerce, including financial services.

Within this last objective, the e-Invoice project implemented by the DGI is successful in companies which have joined the project, making possible the business processes changes, by reducing operating costs, increasing productivity, improving the management and business efficiency.

In this context, the strategy's critical element is to know how to satisfy the recipient's needs by using the channels that the DGI identifies as the most efficient. The guidelines must include:

- The users' preferences regarding services and channels used for their needs.
- All available channels managed in a comprehensive and centralized way, to avoid inconsistencies in the services and to prevent that the particular interests of the various groups involved in each channel prevail over those of the organization.
- Indicators of global service efficiency and effectively used for each channel, as a permanent improvement process.

In 2011 already, The OECD and the International Communications Union (ITU) highlighted the strategic importance of mobile technologies. The growing importance of wireless and mobile technology could affect similarly the public institutions and services both in developing and developed countries.

The government decision to start electronic projects (e-Government) was very important; and currently the mobile Government (m-government) concept to support and improve the Government's performance in a more connected society is a must.

The main reasons for the development of m-government solutions are:

- greater acceptance of these technologies by the public sector;
- Increased use of mobile devices;
- They are easier to use by citizens;
- Easier interoperability;
- Allow the Government to be closer to citizens, and
- The fact that m-government services are cheaper than computer based services.

In the case of Uruguay and the Tax General Directorate, having a strong e-Government strategy supposes create a great advantage for the next qualitative leap which is the transition from e-Government to m-Government.

3. ICTS IN URUGUAY

The Mobile communication technologies revolution and high-speed wireless broadband have started to have a considerable impact on the economic and social development throughout the world. We can add the increasing capacity of the public sector in general and of tax administrations in particular to benefit from the use of ICTs for improving their internal operations, as well as their interaction with citizens and businesses.

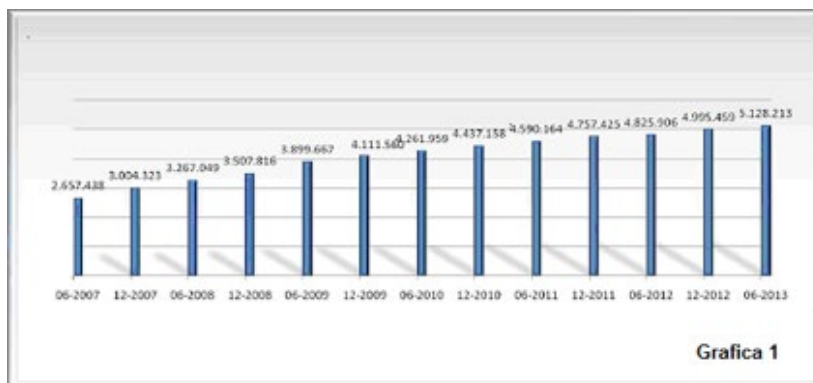
The 2013 report on "Information Society Measurement" by the International Telecommunications Union (ITU) presents Uruguay as the country with the highest ICT Development Index (IDI) and with the smallest digital gap in Latin America. For this measurement, the ITU considers 3 categories and 11 indicators:

- ICTs Access Category
 1. Fixed telephone services per 100 inhabitants
 2. Mobile services per 100 inhabitants

3. International bandwidth per Internet user
 4. Percentage of households having a computer
 5. Percentage of households with Internet access
- ICTs use category
 6. Percentage of people with Internet access
 7. Fixed broadband services per 100 inhabitants
 8. Mobile broadband services per 100 inhabitants
 - ICTs user skills category(Digital gap)
 9. Adult literacy rate
 10. High school education rate
 11. University level education rate

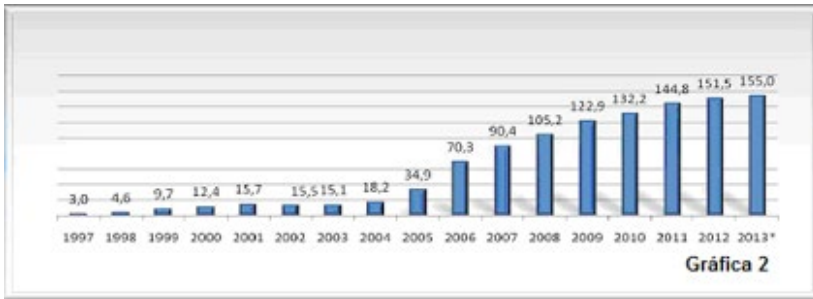
According to this report, Uruguay is in the 47th position on a list of 157 countries. In June 2013, Mobile telephone services grew up in Uruguay to a total of 5,128,213, twice the number from six years ago and 6.3% more than in January-June of last year (Graphic 1). This means that more than 300,000 services were added in one year.

Between 10% and 12% (approximately 600,000) of the total services correspond to smart phones, while 70% of the new services added in 2013 are associated with that category.

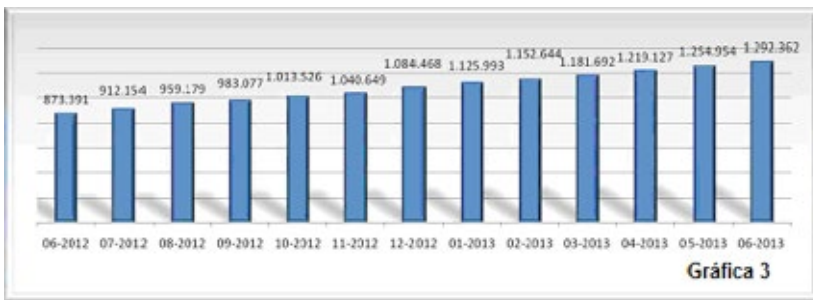


As a result of this growth, mobile telephone density increased to 155 services per 100 inhabitants, or one and a half cell phone per person (graphic 2).

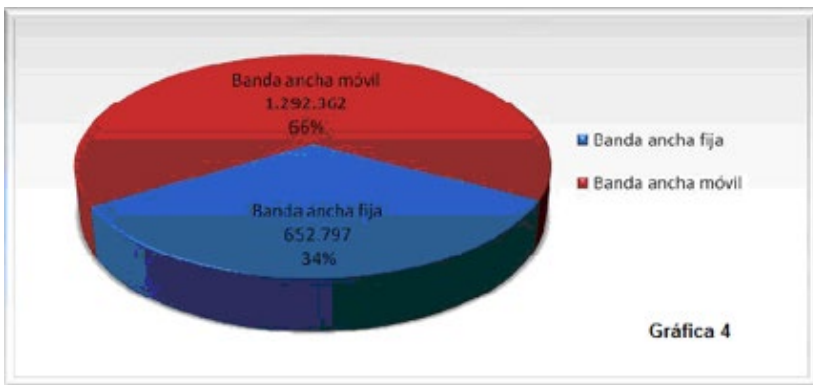
TOPIC 2.1 (Uruguay)



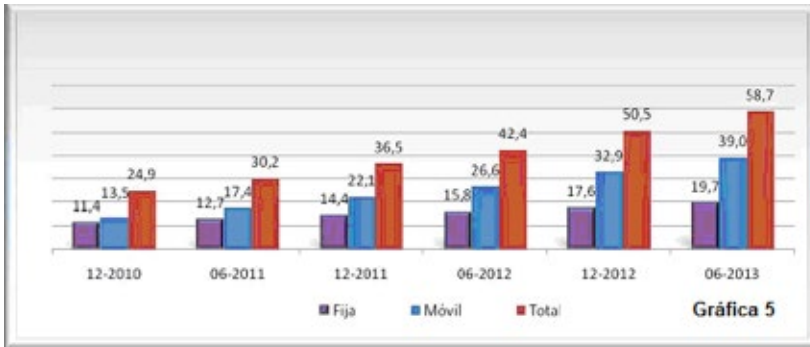
Similarly, the mobile broadband services grew in 2013 up to 1,292,362 at the closing of the first semester, 6% more than a year ago (graphic 3).



In the same period the total broadband internet access services (fixed and mobile) reached a total of 1,945,200, 39.7% more than in 2012. This means that about 555,300 services were added in 12 months (graphic 4).



Based on these figures supplied by the regulatory unit of Communications Services (URSEC), it appears that 58.7 per 100 inhabitants have broadband services (graphic 5).



4. MOBILE SOLUTIONS

The Technology planning needs to be adequately coordinated with the organizational strategy to ensure that appropriate ICTs are used for each service or situation; actions and results must be consistent with the goals, the needs and the global business strategy.

Mobile technologies are deeply transforming citizens' behaviors, providing greater mobility and connectivity, changing their way of living, doing business and accessing news and information.

This trend is extended to business and trade practices, both for public and private services, forcing companies and Government agencies to provide new applications and information access systems.

Mobile devices, with their various applications and software, make easier for service providers to meet the existing needs.

4.1 Technological options

Mobile solutions can be developed in distinct ways, using various options in terms of networks, channels, back-end systems, devices and applications.

In order to identify and offer accessible, effective and sustainable mobile solutions, it is essential to develop a strategy with clear objectives for services delivery with a rational assessment of the available technological options and their results.

Various technical issues related to security, identity management, broadband connectivity, integration, interoperability systems and applications must be analyzed.

The available implementation options include at least SMS, USSD, WAP, MMS, mobile applications and Mobile Websites. Each of these technological options has advantages and disadvantages that we need to know and understand for developing an accessible, successful and sustainable mobile solution.

Given the growing number and power of smart devices (smartphones and tablets) as well as the availability and speed of 3G and 4G networks, the DGI has focused its assessment on two alternatives solutions: mobile website and mobile application.

A web site which adapted to mobile devices is a website using a browser adjustable to the different phones; tablets and other mobile devices screen sizes. Most web sites for mobile solutions simplify the presentation of a standard web page, providing a better experience for the mobile user through improvements in usability, page load speed and contents organization, taking advantage of the mobile phones specific features.

By contrast, a mobile application is a software application running on a specific mobile device operating system and is downloaded to run a specific set of functions.

A very brief assessment of both options is detailed in the table below:

	Mobile application (app)	Mobile website
Scope	Smart devices (cell phone or tablets)	Any device with a mobile browser
User experience	Very strong, low bandwidth dependency	Limited by bandwidth, technology and site performance
Graphics and effects	Higher quality, graphics can be stored in the device, animations and effects limited only by CPU and device memory	Limited by bandwidth, technology

Use of Hardware capabilities	Unlimited access to the device features (camera, Video, GPS, calendar, etc.)	Limited access to geo-location capability
Easy to develop	Specific developments are required for each device or operating system. There are multi-platform type tools	Standard development tools and technologies are used
Resources for development	Requires specific knowledge for each device or operating system, except for multi-platform tools	It takes place once for all devices
Development cost	Traditional implementation; it is more expensive to make it multi-platform	Same as traditional implementation, less expensive than an APP
An easy and fast implementation	Can require a submission and approval process. Users must download it from a Marketplace	It does not require installation, instant availability
Distribution	It must be downloaded and installed from a marketplace or website	Can be used with any mobile browser not required distribution
Installation	It must be downloaded and installed from a marketplace or website	It does not require installation, instant availability
Updates and maintenance	Depends on the Marketplace, in case of being multi-platform may require important resources for development	Easy upgrade, the changes are registered through a browser reload
Search optimization	It is found via search on a Marketplace or through links from the primary site of the Agency.	It can be found through search engines or redirected from main site to the mobile site when detecting a mobile device
Connectivity (Internet or data)	It can be used offline	Required
Security		Same as traditional implementation

When implementing a solution, the General Tax Directorate carried out an evaluation of these options, considering the advantages and disadvantages of each one of them as well as the available technical capabilities of the Agency, and opted by adopting the mobile applications based model. This has a greater projection of future online transactions online, and also allows using all the native features of smart devices (mobile ecosystem).

4.2 DGI mobile services

Tax administrations face a challenge with conflicting characteristics from the State and the Society. On one hand, they have to take actions that ensure proper compliance with tax obligations and increase revenue to provide the State with the resources needed for the country's development. On the other hand, the Society asks for lower taxes, greater transparency and less intervention. In summary, they must simplify and facilitate, but at the same time, increase the control.

Due to this double function of facilitating compliance and monitoring it, tax administrations should make intensive use of information and communications technologies. Based on this premise the mobile application developed by the General Tax Directorate (DGI) offers to citizens and taxpayers a secure access to different tools, online services and the most up-to-date tax information but at the same time it makes possible to monitor and control compliance.

The functions available in this application include:

- News: In this application option, users automatically receive information and relevant reminders related to their tax obligations.
- Press releases: Allow users to receive information about press reports related to the DGI public activities.
- Deadlines: This application allows the user to receive information on deadlines for returns and payments submissions. It inter-operates with the own agenda of the device in order to generate alarms for the user.
- QR controls: They empower citizens to controls through the QR codes of companies with which they interacts.
- Branches: This option allows access to a geo-referenced map of Uruguay where all the DGI offices are located, with their addresses, opening hours and contact numbers. This map is inter-operable with a GPS device.
- Services: access to a sub-menu that allows performing various online transactions.



Within the services and QE controls area, the following controls and transactions possibilities are provided by citizens and taxpayers:

- **ETV reading:** This consultation enable anyone to verify if the electronic tax vouchers (ETV) printed by a taxpayer have been authorized by the DGI. In addition it allows verifying that ETVs have been sent to the DGI and their data match those available to the administration.
- **QR company location:** Through this option, any person can verify if companies are in good standing with the national tax administration and the Social Provision Bank (social contribution) by reading the QR code that those companies have to display at the entrance of their premises and on their cash registers. It also allows verifying the company's basic registration data.
- **QR records query:** This enquiry enable anyone to verify if the traditional paper-based documentation issued by a taxpayer has been authorized by the DGI.
- **PIT/SSAC draft query:** allows the personal income taxpayers and the Social Security Assistance Contributors (SSAC) to check if the draft of their annual return is available. Additionally, after login they can see the detail of the draft.

In the 2014 application version they can confirm these drafts to the tax administration without any other procedure.

- **PIT/SSAC/NRIT refunds query:** Personal income Tax payers (PIT), Social Security Assistance Tax (SSAT) payers and Non-residents Income Tax payers can verify the availability of their tax refunds. After logging in they can see the specifics details, including their beneficial amounts.

- **Payment ticket:** allows taxpayers that have joined the new mobile electronic payment platform to make online payments through the home banking solution of their choice in a very simple way.



4.3 Platform for mobile electronic payment

To develop its mobile payment platform, the General Tax Directorate has adopted an interoperability model, commonly referred to as “Collaborative”. This model involves collaboration between Banks, mobile telephone operators and a trusted third party service provider (in this case the DGI).

The use of this model allows each party to develop a unique scheme of information exchange to interact with any other party.

The use of a “Collaborative” model requires implementing a set of representation standards, processes and common mechanisms for the information exchange, security features implemented by all the parties, among other factors contributing to a better and safer information flow.

3 gateways of different services inter-operate in the adopted model:

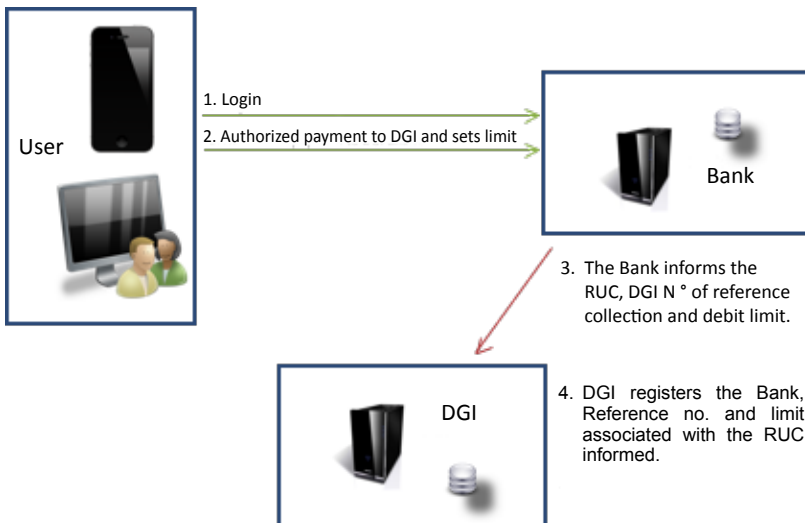
- DGI Services gateway. It is the front-end that inter-operates with the mobile application, and depending on the service requested, it exchanges information with the ANTEL/PEU payment Gateway (State telecommunications services provider).
- Antel/PEU payments gateway. It receives and registers the DGI payment and requests the debits to the financial Gateway. Next,

it confirms the transactions to DGI and allows the subsequent reconciliations of Bank movements.

- Financial Gateway It allows the registration of customers and taxpayers. It receives debits requests from the Payment Gateway and carries out the corresponding debits to the clients/taxpayers accounts.



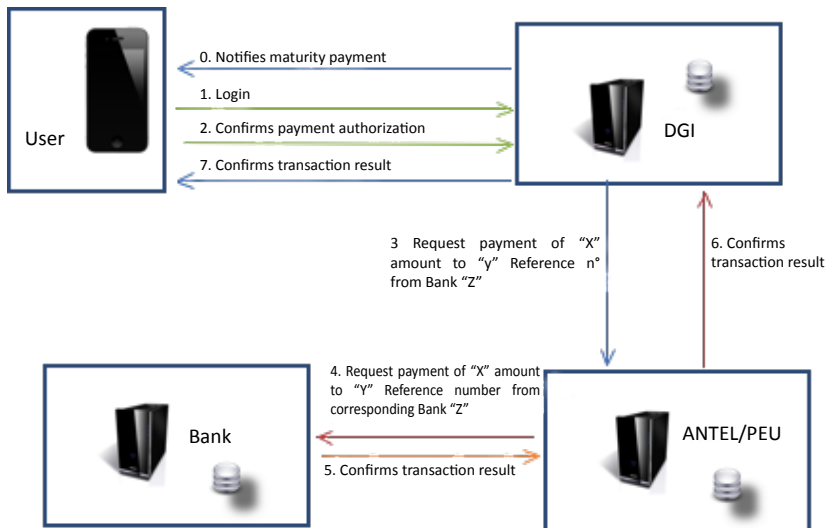
This payment model requires the user to enroll in the system through the home banking solutions provided by the financial institutions and pre-authorize debits from the DGI.



The phases of this enrollment process are as follows:

1. The user logs in at his bank
2. The user authorizes payments to DGI from his account number and for his UIN number and is able to establish limits for these amounts.
3. The bank informs the DGI with the payment reference N °, the user's UIN and the maximum amount authorized for the transactions.
4. DGI registers the Bank's UIN, the reference number and the authorized limit.

When a taxpayer wants to make a payment from his mobile application, he must perform the following process:



0. The mobile application or DGI services report the payment, generating to the user an electronic payment request for an 'X' amount in the mobile application.
1. From the mobile device the user can safely identify himself to the DGI
2. The user confirms the payment
3. The DGI backend services request through the Payment Gateway payment of the amount "X" of reference number "Y" corresponding to bank "Z".
4. The Payment Gateway requests the debit of the 'X' amount with reference 'Y' to Bank "Z".
5. Bank "Z" debits the account and confirms the result of the transaction to the Payment Gateway.
6. Payment Gateway confirms the result to the DGI.

7. DGI confirms the result of the transaction to the taxpayers' mobile device.

All this is processed in safe mode and all the information is sent encrypted.

5. CONCLUSIONS

In the coming years, the use of mobile technology will continue to grow. Numbers provided by the consultant company IDC indicate that by 2013 more than 1,556 million computers (PCs, notebooks, tablets and phones) were sold worldwide, of which more than 1,240 million were smartphones and tablets (79.7%). The same company expects for 2017 a sales volume of 2,460 million devices, among which about 2,140 million will be mobile devices (87%).

According to this, the application of comprehensive and sophisticated information technology will become more and more necessary; tax administrations will face the challenge to recognize in time the opportunities of these new ICTs for improving their services, generating better results at lower costs for the society and the administration.

This shift toward mobile technologies will provide tax administrations with the opportunity to promote the digital inclusion of citizens and taxpayers via electronic tax compliance, allowing not only to benefit from the use of Internet and the information and communication technologies (ICT) in the tax area, but also to decrease the digital gap.

Finally, with these achievements, we are very close to consolidate the services model promoted through electronic tax compliance, and by enhancing it through the use of mobile services, we will establish a "mobile" tax administration.

REFERENCES

DGI (2010): Plan estratégico 2010-2014. www.dgi.gub.uy

AGESIC (2011): Agenda a Digital Uruguay 2011-2015. www.agesic.gub.uy

UIT/OECD (2011): Mobile Technologies for responsive Governments and connected Societies. www.itu.int

UIT (2013): Medición de la Sociedad de la Información 2013. www.itu.int

TOPIC 2.1 (Uruguay)

URSEC (2013): Evolución del Sector Telecomunicaciones. www.ursec.gub.uy

ICTC (2013): Canada's Mobile Imperative. www.ictc-ctic.ca

NIELSEN (2013): Mobile consumer report. www.nielsen.com

THE USE OF TECHNOLOGY IN EXEMPT SERVICES FOR DIPLOMATS

Carlos Muñoz

Superintendent

Superintendency of Tax Administration

(Guatemala)

Contents: 1. General strategy of the tax administration. 2. Service modality for VAT exempt entities. 3. Service modality for entities exempt from ISCV and IPRIMA. 4. Service modality for ISCV exempt entities. 5. Creation of the exempt entities unit.

EXEMPT SERVICES

A. Value Added Tax Law

According to the specific exemptions provided in Article 8 of the Value Added Tax Law –VAT- Decree 27-92 of the Congress of the Republic of Guatemala and its amendments, those entitled to the VAT exemption benefit are:

- Educational centers, public and private.
- Authorized universities in the country.
- Autonomous Sports Confederation of Guatemala and the Guatemalan Olympic Committee.
- Guatemalan Social Security Institute.
- Diplomatic and consular missions accredited before the Government of the Republic, as well as the diplomatic representatives, diplomatic and consular officials and employees, included in the Vienna Convention on Diplomatic and Consular Relationships, on the condition that the countries to which said missions and persons belong will grant equal treatment as reciprocity.
- International Organizations which, according to the respective agreements signed by the Government of the Republic of Guatemala and said entities have been granted tax exemption.

B. Law on the Circulation of Land, Maritime and Air Vehicles Tax

As provided in article 21 of Decree 70-94 of the Congress of the Republic of Guatemala “Law on the Circulation of Land, Maritime and Air Vehicles Tax” and article 112 of Volume II Specific Tax on the First Registration of Land Motor Vehicles of Decree 10-2012 “Tax Updating Law”, those entitled to the exemption benefit are:

- The State Entities and the Guatemalan Social Security Institute
- The universities authorized to operate in the country
- The Diplomatic Missions and their foreign officials, the Consular Missions and their officials
- The Volunteer and Municipal Fire Departments
- Individuals who as a consequence of war injuries are disabled -ISCV-
- Cooperation and assistance projects and programs provided by other States, International Organizations and foreign Non-Governmental Organizations.

1. GENERAL STRATEGY OF THE TAX ADMINISTRATION

A. Reduce tax evasion, fraud and customs smuggling

SAT has devoted its efforts toward ensuring that taxpayers correctly comply with their tax obligation, by impartially and integrally applying the tax and customs legislation.

To promote tax compliance as provided in the legislation, actions have been implemented whereby taxpayers who do not correctly comply with their obligations and taxpayers who do not want to comply, as well as those who have not registered and affiliated in the corresponding taxes may perceive greater risk through the effective and timely application of the sanctions provided in the legislation. Actions have also been implemented for creating awareness and establishing strategic alliances with other State entities, and locating taxpayers to thus increase the effective taxpayer base, in addition to actions for controlling customs clearance and active support and participation in the National Commission for Combating Smuggling.

The following are the objectives of the strategy for “Reducing Tax Evasion, Fraud and Customs Smuggling”:

- Promote Collection, through the improvement of the Tax Compliance Verification and Control Processes
- Improve Customs Management by strengthening and simplifying the customs processes

- Improve taxpayer assistance through the simplification and improvement of services

The actions for achieving the objectives are the following:

- Make available non-face-to-face services to the taxpayers and others responsible
- Strengthen human resources management, development and retention
- Improve the storage and processing capacity of the information and communication systems
- Improve the critical substantive and administrative support processes
- Improve the physical infrastructure of the offices, agencies and customs

Management Model of the Superintendency of Tax Administration According to compliance attitudes

Factors influencing taxpayer behavior are of a cultural, legal, social, psychological and personal nature, for which reason SAT has determined action strategies according to their compliance attitude. The first segment includes the taxpayers that are willing to do what is correct, for which SAT has determined actions that facilitate compliance with their tax obligations. In the second segment there are the taxpayers who wish or try to comply but do not always comply, due to ignorance and for whom SAT has determined assistance and orientation actions regarding legislation, procedures, tools and processes; in the third segment one finds the taxpayers who do not wish to comply, but if they are identified by SAT, are willing to comply, and for whom SAT has determined actions for detecting and dissuading them from not complying, while in the fourth segment there are the ones that have decided not to comply, and to whom SAT must apply the legislation's maximum rigor.



B. Non-face-to-face services made available to the taxpayers ExenIVA

The system known as ExenIVA was established in 2006. It allows for electronically generating the proof of exemption and has been designed for facilitating compliance with tax obligations by individuals or corporations and entities that enjoy Value Added Tax – VAT exemption.



Objectives of the ExenIVA system:

- Improve taxpayer service, assistance and relationship
- Reduce queues in businesses as a result of the issuance of proof of exemption on paper
- Facilitate, decentralize and automate the process for issuing proof of exemption and the corresponding reports
- Increase the institutional effectiveness
- Exercise automated control of reports and facilitate issuance.
- Reduce queues in businesses due to Value Added Tax exemptions
- Reduce corruption and misuse of Value Added Tax exemptions.

Declaraguatate

The system called Declaraguatate was made available to taxpayers in 2011. It allows taxpayers and others responsible to complete their forms electronically, then send them for validation by SAT and subsequently make payment through the different means of the banking system.



Innovation award.

In the 2013 International Congress of Science, Technology and Innovation, organized by the National Science and Technology Council (CONCYT) and the National Secretariat of Science and Technology (SENACYT), SAT was awarded the first prize in the contest called "Innovation Award" within the "Institutional Innovation" category, given that Declaraguatate has proved to be a support tool that allows for filling out and submitting different tax forms in an easy and speedy manner.



“Guatemala: 1st. Prize in Central America in ease of tax payment”.

The World Bank, through the Doing Business Project evaluates the obligatory taxes and contributions which a medium-sized business must pay or withhold in a specific period and also measures the administrative burden involved in the payment of taxes. The project analyzes and compares the pertinent regulations that refer to the cycle of activity in small and medium-sized national businesses of 189 economies.

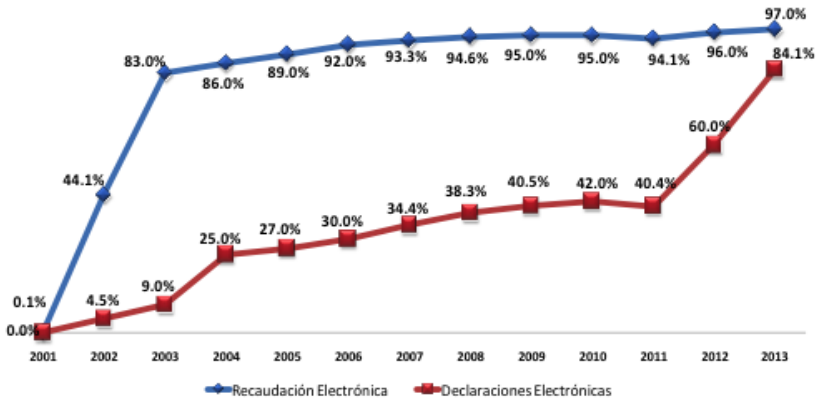
Thanks to achievements that SAT has promoted in the filing and payment of taxes through the Declaraguat system, in the most recent publication of results of Doing Business, Guatemala was awarded the first place of Central America, third place of Latin America and position 85 at the world level, going from position 129 in the year 2012 to position 85 in the 2013 measurement.



C. Use of depersonalized means for the filing and payment of taxes

As a result of the success in the use of the Declaraguat system, the registry of returns submitted to SAT through electronic means increased from 40.4% in 2011 to 84.1% at the closing of 2013, which situation evidences the functionality and great acceptance of the tool. As for the results according to kind of tax, by February 2014, 100% of the Income Tax and Value Added Tax returns were filed through this means, as well as 85% of the small taxpayer forms. Graph II.1

Graph II.1
Collection and returns submitted via electronic means
- Years 2002-2013



Source: SAT collection via banking system

2. SERVICE MODALITY FOR VAT EXEMPT ENTITIES

A. Previous process

Exención
Fiscal en
PAPEL



Exempt or Diplomatic entities entitled to the Value Added Tax-VAT exemption -; in the businesses they they paid cash, by check or credit or debit card and the according to the value of the VAT, the exempt ones used used proof of tax exemption on paper.

Disadvantages

- Lack of controls by the TA
- Processing of authorization and assessment of exemption and its face-to-face use
- Authorization of exemptions on paper which were used by individuals other than those authorized
- Processing of assessment of exemptions before the TA for authorization of new exemptions on paper

B. Current process

Exempt entities or Diplomats who are entitled to Value Added Tax exemption pay with credit card with VAT exemption or any other form of payment (cash, check, credit or debit card) plus VAT exemption card; the exempt consume and the store requests authorization to the card operator and if the payment is made with credit or debit card, authorization is requested to the issuing bank for the value of the purchase less the VAT, and at the same time, authorization to SAT, for the value of the VAT. Once it has the authorization from the Bank and SAT, the operator authorizes the store for the total amount of the purchase; the exempt individuals sign the voucher which includes the value of the purchase less VAT and the VAT exemption.



**Exención
Fiscal
Electrónica**

Advantages

- SAT has an adequate control system
- It simplifies the process for issuing proof of exemption and the corresponding reports,
- Significant reduction of processing times in establishments.
- Process for use of “on line” exemptions
- It is ensured that the user of the exemptions is the authorized person

C. Electronic system for proof of VAT exemption –ExenIVA

ExenIVA is a system that allows for electronically generating proofs of exemption. It has been designed to facilitate compliance with tax obligations, which system operates with an electronic personal identification card; allows for counting on an electronic registry and control of transactions carried out which are exempt from the payment of Value Added Tax –VAT-. It also simplifies the preparation and delivery of the quarterly report that must be presented to the TA.

The means for issuing proof of VAT Exemption are:

Card:

To purchase in affiliated establishments through the Point of Sale terminal.

The card for purchasing in establishments may be:

a. Exemption card without Credit:

Characteristics:

- Only the logotype of the issuing bank,
- Red stripe in the upper part,
- Used solely to generate evidence of VAT exemption
- Payment of purchase is made in cash, check,
- Debit card or any other credit card.



b. Exemption card with credit:

Characteristics:

- Logotype of the issuing bank and of the card operator
- Simplifies the transaction
- Used to make payment and generate evidence of the corresponding VAT exemption in the same transaction



There are two card modalities, namely:

- Individual: when the exempt taxpayer (cardholder) is an individual. For example, the owner of a private Educational Center (considering) that the purchases made must be related to the educational center.)
- Institutional: when the exempt taxpayer (cardholder) is a corporation. For example, a State entity, a University or an Educational Center.

2. Web Site for users:

- a. Generate proof of exemption.
- b. Enter additional information to the proof of VAT exemption generated through the Points of Sale.
- c. Prepare and submit quarterly reports, regarding proof of exemption used.
- d. Undertake inquiries.

3. SERVICE MODALITY FOR ENTITIES EXEMPT FROM ISCV AND IPRIMA

- The Ministry of Foreign Relations makes the corresponding grading, based on its registries and at the request of the Embassy, Consulate, International Organization or Mission in question.
- After obtaining the authorization from the Ministry, a visit is made to the Tax Agency located at the Ministry of Foreign Relations, so that SAT may enter the registry in the corresponding system.
- At the Tax Agency, the Diplomat is allowed to print the electronic decal; or else, the Diplomat, wherever he may be, may enter the SAT Web portal to print the electronic decal.

4. SERVICE MODALITY FOR ISCV EXEMPT ENTITIES

A. Previous process

The payment of the Vehicle Circulation Tax – ISCV-, is a fiscal obligation that must be paid every year. Said tax has been paid through the teller windows of authorized banks, obtaining in exchange the decal which evidenced the payment of the Vehicle Circulation Tax -ISCV-, the same which appeared in the windscreen of all vehicles circulating through the streets and avenues of our country.



Disadvantages for the Diplomats


- The processing of the ISCV identification -decal- used to be made face-to-face before the TA office located at the Ministry of Foreign Relations.
- The decal had to be adhered to the vehicle's windscreen
- New process for replacing the identification
- The identification only included the fiscal year and the inventory code

B. Current Process

In 2014 issuance of the decal following payment of the Vehicle Circulation Tax is done through the electronic system known as Declaraguante, which implies that it be electronic.

Characteristics of the Electronic Decal

Previously the decal was obtained at the authorized banks when the tax was paid and in the case of loss or theft, replacement had to be processed, thereby resulting in an additional expense for the Tax Administration as well as the owner.

IMPUESTO SOBRE CIRCULACIÓN DE VEHÍCULOS Calcomanía Electrónica (Web)		Código del Vehículo 1997-473874-5	SAT <small>Guatemala Centro América</small>
Año 2014	Placa TRC888WWW	<ul style="list-style-type: none"> • Portar esta calcomanía al circular con el vehículo. Las autoridades competentes podrán solicitarla. • No necesita adherirse al vidrio ni a la placa. • Verificable en Declaraguatze (SAT-4093) y/o Portal SAT (Vehiculos Consulta) 	

Since the new decal is electronic, the taxpayer may print it as many times as he wishes without incurring additional expenses, except for the printer's ink and paper.

The decal should not be placed in a visible area in the vehicle; rather, the taxpayer should carry it with him as if it were the driver's license and present it, if required.

The physical characteristics of the electronic decal are:

- Fiscal year
- License plate number
- Vehicle code
- QR Code (detail of the vehicle's data) which replaces the bar code

The new electronic decal will not show:

- Personal data, taxpayer's address
- Any other personal data of the vehicle's owner (for security of Guatemalans)

5. CREATION OF THE EXEMPT ENTITIES UNIT

Decree number 13-2013 of the Congress of the Republic of Guatemala; whereby amendments are made to the Organic Law of the Superintendency of Tax Administration –SAT- Number 1-98 of the Congress of the Republic. Article 71 of the Decree provides that SAT will count on a specific unit for controlling taxpayers who are entitled to tax exemptions of any kind. It also states that the Superintendent

must annually submit to the SAT Board, a report showing that he has duly complied with the follow-up, control and examination of taxpayers that are entitled to tax exemptions of any kind, as well as having carried out the necessary actions for regularizing the cases of tax noncompliance. In February 2014, the Exempt Entities Control Unit was created through Resolution Number SAT-DSI-217-2014.

Functions

- Determine the rules and procedures that apply to taxpayers entitled to exemptions of any kind.
- Administer the actions, mechanisms and management tools that may allow for maintaining adequate control of taxpayers that are entitled to tax exemption of any kind.
- Identify the cases of taxpayers that are entitled to tax exemptions of any kind, who have failed to comply with their tax and customs obligations or show an inadequate use of their benefits.
- Provide to the pertinent entities, when appropriate, information or input that may allow for designing and initiating corrective, examination or legal actions, when identifying or detecting taxpayers entitled to tax exemptions of any kind, who have failed to comply with their tax and customs obligations or show an inadequate use of their benefits.
- Analyze, follow up and verify compliance with formal obligations by taxpayers who enjoy tax exemptions of any kind.
- Administer the system for controlling taxpayers who are entitled to tax exemptions of any kind.
- Carry out, within the sphere of their competency, analyses, studies and reports related to the control of taxpayers entitled to tax exemptions of any kind.
- Prepare statistics and reports regarding the management of taxpayers who are entitled to tax exemptions of any kind.
- Analyze the legislation and rules applied to taxpayers who are entitled to tax exemptions of any kind, for identifying the weaknesses that may facilitate practices contrary to the benefit granted and propose the corresponding corrective measures.

- Prepare reports related to the follow-up and control of taxpayers that are entitled to tax exemptions of any kind and the actions carried out to regularize the cases of noncompliance with tax obligations or the inadequate use of the benefits granted.

CONTAC CENTER SUNAT: IMPROVING THE RELATIONSHIP WITH CITIZENS/TAXPAYERS

Tania Quispe

National Tax Superintendent
National Superintendency of Customs and Tax Administration
(Peru)

***Contents:** 1. The inductive management. 2. Contact Center, the evolution of the service. 3. The model and its application in SUNAT. 4. Center of Virtual Control (CCV) and electronic notification.*

In the Mission of SUNAT you can read the following: Promoting compliance with tax and customs through its facilitation, the strengthening of tax awareness and the generation of risk; through the management of integrated processes, the intensive use of technology and with a team committed, competent and unified that provides excellent services.

In this sense, it is very important to establish strategies that seek voluntary compliance, making appropriate use of the technology, which is available to the taxpayer.

1. THE INDUCTIVE MANAGEMENT

One of the premises of which should start to provide effective service to citizens, that promotes a voluntary compliance, promote tax awareness, must pass through understanding that does not apply the same strategy to all taxpayers alike. So, segmenting them, it may exercise an action appropriate to each profile contributor, allowing in this way, not only more efficiently allocate resources of the Administration, but will improve the processes of relationship between citizens and their Tax Administration.

SUNAT had decided to follow the segmentation model which has been recommended by OECD, the one which divided taxpayers into groups according to their attitude towards the fulfillment of tax obligations.

So, there is a first group of taxpayers who are willing to comply, to them SUNAT should facilitate compliance. A second group is those who while trying to meet, not always succeed, and who should help them meet. The third group is the concerned taxpayers who will meet only if they have been required by the Administration; for this group, it is necessary to reinforce the feeling that will be detected in your default. Finally, the fourth group consists of taxpayers who have decided not to comply with its obligation, for whom it is necessary to take actions of control and monitoring that can reach, even the use of criminal actions to suppress the evasive attitude to compliance with tax obligations.

Once segmented the register of taxpayers, you can design different strategies for approaching the taxpayer. In this sense, be understood that for the first three groups, it is necessary to have communication channels flowing with the taxpayer so that, in different shades, be warned of its possible non-compliance with approaches that are differentiated according to their profile. Also is in evidence that the fourth group, the evaders volunteers, rather than communication, need very tight control and severe actions of confrontation to attack decidedly tax behavior.

In this way, it is clear that we must strengthen communication with the taxpayer to induce it to comply. The differentiated communication strategies have a common theme, which is the greater linkage with taxpayers, using the existing channels.

In this context, SUNAT has established as one of its strategic objectives to provide quality services to increase tax compliance. For this reason, SUNAT has been working in the transformation of their services, favoring a solution multi-channel that facilitates an integrated communication, "through a Contact Center".

2. CONTACT CENTER, THE EVOLUTION OF THE SERVICE

One of the most representative service tools to the taxpayer in the last years of the Decade of the '90 and the early years of the new Millennium was the establishment of a platform of phone service, with national reach, which was called Call Center.

This phone service quickly evolved from a few internal lines of the Headquarters until reaching exclusive ad-hoc infrastructure to meet the demand for information of taxpayers which are complemented by software that provides the call information, the taxpayer who called and, in addition, allows to record information relating to the same call.

However, in a society where consumers constantly receive more and more services on the part of private sector providers, the tax administration also should expand the range of benefits offered by their taxpayers. It is no longer enough to have a service of receiving calls on the part of taxpayers who need support and guidance to meet their tax obligations. The development of social networks, the widespread use of mobile phones and the growing market for smartphones that allow receipt of information through not only SMS (Short Message Service), but the email, both of free service (like Gmail or Outlook,) for example, as of the service of corporate email, open new channels of communication with the taxpayer that the tax administration cannot attend.

In this sense, a Contact Center is the central point of contact for multiple interactions between a company and its internal/external customers. This includes not only interactions of telephone and voice, but also e-mail, inquiries via the web, chat, fax and even video. The Contact Center offers citizens a means to communicate with the Administration and must be designed to maximize your satisfaction and to achieve greater efficiency for the fulfillment of tax obligations.

For this reason, today, taxpayers, rather than a call center, are requiring a center of administration that allows them to deal more effectively with the tax administration. This means, an interactive contact center, allowing you to integrate different areas of Administration to receive and deliver information to taxpayers, designed to locate them, guide them, convince them, induce them to comply, charging them, investigate them and retain them.

3. THE MODEL AND ITS APPLICATION IN SUNAT

Currently SUNAT has a solution of call center that reaches 140 positions, serving about 3 million calls in 2013. On the other hand, since 2004 an inductive telephone contact for the recovery of the debt is made through the so-called "Telecobranza" with important recovery percentages, service provided by an external supplier, and implement the institutional center contacts.

At this point, we should note that the Institutional Strategic Plan 2012-2016 includes, in addition to the ongoing operational programmes and exchange programmes, improvement programs, which seek to the optimization of Tax and Customs processes at the same time support and support processes. One of these programs is the Program for the improvement of the Tax Compliance and Customs (PMC), which seeks to increase the efficiency of the actions of control of compliance and facilitation.

The PMC is an ambitious program that has all the institutional support and includes at the same time, five projects: Control of Compliance, Enforced Collection, Audit and Oversight System, Integrated Risk Management and Books and Electronic Invoice.

Within the framework of the Program of Improvement of Compliance (PMC), specifically within the Project of Compliance Control (PCC) a system of relations they have been working with the taxpayer, which develops actions of inductive management seeking, among others: bridging the gap of presentation, improve the rate of recovery of the debt, improve the rate of satisfaction of the client (users and taxpayers); as well as reducing compliance costs for taxpayers.

However, inductive actions can be general or custom. In the first group, SUNAT has been developing tasks of modernization and expansion of coverage of channels attention, simplification of rules, processes, and services, as well as the improvement of the diffusion to the taxpayer.

Within custom inductive management actions, a pilot project whose objective was to improve the relationship with the citizen and/or taxpayer to foster a change in their behavior, inducing it to comply with their tax obligations through calls, e-mails and texting in an articulated manner is worked during the year 2013.

Thus, using the platform of the consultation station, were outbound calls targeting delinquent taxpayers so that they change their behavior and to declare and pay on their due date. At the same time, were sent messages via mailing, to emails from taxpayers identified within risk groups that induced them to comply with their obligations: reporting, payment of taxes and payment of fractionation. Mailing service was developed through an external provider, contracted to do so.

In this same sense, this year will enter production contact via SMS, so that they can reinforce the virtual channel for direct communication with the taxpayer.

- The processes that intend to manage are:
- Control of the Omitted the Statement – “Presentation Gap”
- Control of the Omitted the Payment – “Payment Gap”
- Control of the Splitting of Debts
- Inductive Performances of “Truth Gap”
- Maintenance of Register
- Others Inductive Performances

Groups at risk that have been identified are: 1) New Registered Taxpayers (which may not know that they must submit their declaration or may have entered a date home of activities that is not real, and as a result, result contains the presentation); (2) Taxpayers that omitted the presentation of the statement (those that are constantly omitting the presentation, of which it seeks to know why not present their statement); (3) Taxpayers that omitted the payment (presented his statement with tax to pay, but they do not pay, taking debtors balances or payment orders); (4) Taxpayers that omitted the payment of fees of fractionation (taxpayers with new fractionation and those with fees due and therefore at risk of losing the benefit); (5) with inconsistencies in statements (as a consequence of information crossing) and (6) taxpayers that are not found.

In response to the identified segments and objectives processes, actions performed range from calls to validate data as the date of commencement of activities, reminders of due date via e-mail, informational messages to email or calls about the condition of failure to the presentation of the monthly or annual sworn declaration, inducing the regularization; as well as calls to ascertain the reasons for which the taxpayer is not stating, this group contains the statement, for example. In the case of matters to the payment, contemplated sending SMS informing of this situation and if applicable, sending an alert if the notification of a payment order (OP) will be transferred to enforced collection.

4. CENTER OF VIRTUAL CONTROL (CCV) AND ELECTRONIC NOTIFICATION

A robust virtual contact enables the development of products in house that support the fulfilment of tax obligations. In this way, a scheme of electronic notification to reduce time limits and make it transparent, minimizing the chances of error, is extremely useful for improving processes in the face to taxpayers.

In this sense, SUNAT comes perfecting his contact with taxpayers, prior to the audit process, through the System of Management of Massively (GEMA), which was created for the Administration and monitoring of inductive actuations and which allows selected taxpayers sustain the inconsistencies found in the affidavits of the Value Added Tax, and that they can make their disclaimers or eliminate them, avoiding cumbersome determination processes involving debts by sanctions.

Inductive actuations can be face-to-face or virtual; the first, managed through the Taxpayer Service Centers, as the latter, through the Center of Virtual Control (CCV).

Since 2010, SUNAT is working on the CCV, aimed at facilitate the taxpayer interaction with the administration over the Internet. The system looks for that taxpayers previously selected (either by a program of control or its size) may correct or present their disclaimers to the notifications received either by omission to the Declaration or gap of accuracy (information declared by taxpayers versus the informed by third parties).

This control system is currently applicable to taxpayers (individuals) affects the income tax; however, there are plans that include the VAT control, once it has the information obtained from invoice and e-books, project next to implement massively.

The management through the GEMA for natural persons required to file the income tax, has as a result that the universe of taxpayers intervened, 40% manages to be notified and of this total, 80% performs the actions of remedy through the CCV. This demonstrates the effectiveness of the GEMA.

However, shows that 60% of taxpayers fails to be notified promptly, demonstrating a problem with physical reporting system, which would lead to consider alternative forms of notification that will ensure greater efficiency, as the electronic notification option.

At this point, the Contact Center has an additional positive effect, since fluid through media communications, that provides this tool, will ensure that the taxpayer that is notified administratively through his electronic mailbox can learn promptly of that notice has been deposited. This fact is crucial to give strength to the electronic notification process, though it is important to ensure that taxpayers are actually aware that they have been notified and that the legal deadlines for the various standards are met properly.

Guarantee a proper notification becomes, in this way, a very important service because it ensures the taxpayer knows appropriately that has received an administrative act, notified according to current standards and prevents that, as is currently the case, citizen only knowing that they have any summons or requirement when they have already defeated deadlines, becoming in this way subject of sanctions or being prevented from exercising challenge actions before the expiry of the time limits.

The proposed model of Electronic Notification incorporates, as part of the process, that when a taxpayer gets a document in the electronic box, a warning is fired to the electronic mailbox that it has declared in the Register and the other addresses that he reported. In addition, also sends an SMS to cell phone declared by the taxpayer. As you can see, the role of the Contact Center in this scheme is paramount, every time that with this tool ensures that the taxpayer takes notice that the tax administration has made him, allowing him to exercise his right to challenge or avoid generating offences, depending on the type of document that is notified.

In conclusion, the implementation of a Contact Center would improve the performance GEMA and the electronic notification, because whenever a requirement is notified to the taxpayers in his official electronic mailbox, alerts will be sent either to his personal emails or mobile phones (according to his profile) communicating the notification, and if there is a response by the taxpayer, in a period previously defined, shall be carried out informational calls in order to avoid sanctions product of a lack of knowledge of this notice.

TAXPAYER ASSISTANCE CHANNELS AND PLATFORMS“EXPERIENCE OF PORTUGAL

Jose Antonio de Azevedo Pereira

General Director

General Directorate of Taxes

(Portugal)

***Contents:** 1.Reform of the Portuguese invoicing. 1.1. Promoting compliance and fight against tax evasion and avoidance. 1.2. The elements of the new system. 1.3. Reform background. 1.4. Procedures for the communication of invoices and shipping documents' data to the tax administration. 1.5. Final consumer's tax benefit. 1.6. Challenges of the new system. 1.7. System implementing costs for companies. 1.8. System benefits. 1.9. Cost reduction for businesses. 1.10. Results.*

1. REFORM OF THE PORTUGUESE INVOICING SYSTEM

1.1. Promoting compliance and fight against tax evasion and avoidance

Council Directive 2010/45/UE of 13 July 2010 has been transposed into the Portuguese law within the context of a major reform of the invoicing system for tax purposes.

A new package of rules was published in August 2012 including the invoicing provisions together with the regulation of the electronic transmission to tax authorities of the invoices' data and the documents supporting the movement of goods.

1.2. The elements of the new system

The previously mentioned set of laws is integrated in a system that was named “e-facture” (e-invoice), which comprises the following elements:

- The universal duty of issuing an invoice applicable to all economic agents, even when the purchaser is the final consumer and does not request the invoice;

- The obligation of all companies to electronically send the essential data of the issued invoices in the previous month to the Portuguese tax administration (AT);
- The creation of a site on the internet where AT provides the purchasers, both companies and natural persons, as well as issuers, with the data of the invoices communicated, as provided in the previous number;
- The possibility for the final consumers to insert in the referred site the invoices where they are mentioned as purchasers, which they have checked that were not communicated to AT by the issuers. This consultation is only possible if authenticated with the individual password of each purchaser;
- The attribution to final consumers of a tax benefit corresponding to 15% of the incurred VAT in the invoices of their purchases, provided they have requested the insertion of their Tax Identification Number (TIN) in the invoice;
- The obligation for companies that dispatch goods to electronically communicate to the tax administration the information concerning transportation before transport starts;
- The creation of a double tax benefit with the acquisition of computer systems. Thus, in 2013 expenses with buying new systems can be accounted as full costs. It is also possible to consider as full costs the replacement of the old invoicing computing systems previously used by companies.

1.3. Reform background

The implementation of a new invoicing system in Portugal is the result of two important previously adopted legislative instruments related to the electronic invoicing systems:

- The obligation for companies with a turnover higher than € 100.000 to have electronic invoicing systems previously certified by the Portuguese tax administration. In 2010 this obligation was put into the Portuguese law;
- The obligation of the companies mentioned above to produce, in accordance with their electronic invoicing and accounting systems, a standard audit file in the same SAF-T file model approved by the OCDE. This obligation exists in the Portuguese law since 2007.

1.4. Procedures for the communication of invoices and shipping documents' data to the tax administration

The reform of the Portuguese invoicing system came into force in January 1, 2013. The electronic communication of the transport documents' data came into force in May 1 of the same year.

Companies may submit to the tax administration the issued invoices, by either of the following means:

- Through the web-service, between companies' electronic invoicing systems and tax administration's electronic system, communicating in real time the invoices' data at the moment of the issuance. This via is optional and may only be used by companies with an electronic invoicing system;
- Through the submission of a SAF-T file in the tax administration site on the internet, provided companies have an invoicing system certified by the Portuguese tax administration;
- Through the direct insertion of the invoices' data in the tax administration site on the internet;
- Through the delivery of a declaration containing the global amount of issued invoices in each month and its corresponding value.

The communication of the invoices' data by one of the previously mentioned means is monthly made, until the 25th day of the following month of its issuance. Until the end of that month the Portuguese tax administration handles the information received and provides the consumers with the data concerning the purchases they made after the 1st day of the second following month. The consumers can insert the invoices related to their purchases, which have not yet been inserted in the tax administration site.

1.5. Final consumer's tax benefit

In the year following the invoices' issuance, the tax administration automatically assigns to the purchasers the previously mentioned tax benefit, concerning the invoices corresponding to their acquisitions in the following sectors of economic activity:

- Food and drinks services;
- Hotel and accommodation;
- Hairdresser services;
- Cars and motorcycles repairing services.

1.6. Challenges of the new system

The implementation of the "e-facture" (e-invoice) project and the reform of the invoicing system have placed three major challenges before the AT:

- The level of consumers' adherence to an innovating project without any precedent in what concerns involvement of citizens. The project's key of success lies in turning the issuing of an invoice for all transactions into the general rule in the Portuguese society;
- The capacity of the Portuguese companies to make the electronic communication of the relevant tax data of the invoices they have issued;
- The capacity of the tax administration technical resources to receive and process all the invoices sent by the economic operators, as well as the data introduced by consumers.

The available data shows a positive response to the challenges. In fact, consumers' adherence was above our best expectations.

In the 4 sectors mentioned before, the number of Portuguese consumers that required the insertion of their TIN in the invoices was more than 2, 7 million, whom consequently enjoyed the corresponding tax incentive.

The companies' capacity to comply with the communication obligation reached also a good level; more than 700.000 companies managed to make the communication within the legal term.

The capacity of AT's electronic system in the reception of the communicated data proved to be very effective; until January 2014 it processed 4.649.006.039 invoices, involving a VAT total amount of 52.967.808125,03 €.

The available results show that the system's design, the strategy followed and AT's efforts in its implementation turned out to be the appropriate ones.

It is important to emphasize AT's communication strategy and dialogue to inform and clarify the citizens and the economic operators.

This effort of dialogue, clarification and information translated into the following initiatives:

- 10 workshops directed to the economic agents;
- Personalised meetings with 200 economic agents and representative organizations;
- 107 thousand training hours provided to the economic agents;
- 44 million e-mails sent to final consumers and economic agents;
- More than 20.000 responses to clarification received by e-mail

During the procedure there were no incidents. There were no interruptions either and there is no record of slowness in data transmission, due to information traffic overload problems.

Invoices have been received from more than 700.000 companies that sent the files through:

- Real time web - service connexion - 18.877 companies
- SAF-T files submission - 444.739 companies.
- Direct data input on Finance Portal on the Internet - 245.633

During all the period of invoices' submission the site performance capacity was always above traffic volume. In fact, even though at the moment of more traffic more than 50 thousand files were sent on a daily basis, the network load was always lower than 50%.

Data processing system speed was of more than 500 invoices per second.

The most relevant fact in the current state of project implementation is the adherence level to the system that Portuguese consumers showed in the very first month. In fact, more than 6 million people understood the importance of their role in the prevention of tax evasion.

The "e-fatura" (e-invoice) system answered properly to the first challenges faced at its launch; it operated technically without interruptions or overload, there were no reported incidents involving companies when communicating their data.

1.7. System implementing costs for companies

The system has been designed not to produce additional burdens on businesses. Actually, the operating system is based on the profitability of the other two systems that businesses were previously required to have - the generation of a SAF-T (PT) audit file and holding certificated systems for invoice issuance. The first of these obligations is already in force since 2008 and the second since 2010.

The invoice communication is merely the extraction of the corresponding file to SAF-T (PT) invoice file and its submission on AT's website on the Internet. The invoices integrity is guaranteed by SAF-T (PT) file and by AT's certification of the invoicing systems used by businesses.

Therefore, using the mechanisms businesses already disposed of, this invoice communication system was designed not to bring additional costs to them.

AT was also determined to create the necessary conditions so that businesses did not need to carry out any other procedure when submitting invoice files. For this purpose, a real-time communication system was provided through a web service, electronically linking the businesses' invoicing systems with the AT system.

For small businesses a tool for the invoice input with authenticated access and free of charge was made available on AT's website on the Internet,.

For self-employed persons an invoice issuance system, also free of charge was made available on the Internet.

Consumers can check in the Internet AT's website if issuing companies have reported all invoices relating to their purchases and directly report data to AT's systems, in case communication was not made by issuing companies.

The system shall also take effect in reducing businesses' tax compliance costs. With the consolidation of the system AT will be able and will undertake a review of the businesses declarative tax liabilities and will exempt those that are no longer needed, proposing its waiver.

Likewise, with the system implementation, AT will be able to analyse and more quickly provide to businesses their VAT refunds requests.

1.8. System benefits

The Portuguese Tax Administration will now offer an important information service, monitoring as well as supporting businesses, in order to avoid situations of tax non-compliance that many times is not intentional, therefore preventing the high costs associated to those situations, namely penalties and compensatory interests or default interests and procedural costs. This is one of the most important goals of the "e-fatura" (electronic invoicing) system.

AT has now access to the information concerning the facts subject to taxation, even before the beginning of the periods to fulfil tax obligations, which allows it to assist businesses in avoiding non-compliance situations and to solve discrepancy situations between

real values and declared ones, in time to prevent the costs associated to the exercise of the authority of the State (auditing, imposition of sanctions and coercive acts).

The new system will start a new dimension in what concerns the role of AT in the prevention and deterrence of tax evasion, leaving for secondary plan its authority functions that are always burdensome for the State and businesses.

With the system implementation AT has also initiated the setting of a new feature, a support service to businesses, providing a wide range of information allowing the detection of non-compliance and tax evasion risk situations.

Until now, as soon as AT detected those situations, avoidance procedures were initiated, as well as inspective, punitive and coercive procedures, through the exercise of its authority functions. From now on, AT shall make this information immediately available to companies, inviting them to rectify the detected situations or to provide additional explanatory information.

This new AT function does not use authority functions, always costly to taxpayers and the State. Only uses the information as the essential instrument for the normal and voluntary fulfilment of tax obligations.

Therefore, the information replaces authority as a key instrument of promoting voluntary compliance with tax obligations.

On the other hand, this function places side by side tax administration and businesses, as partners interested in the same goal of increasing voluntary compliance and decreasing or even tending towards the elimination of the costs associated with default.

With the new technological tools and the use of information, AT has started to work within a network and interacting with businesses, promoting with the latter maximum efficiency in the operation of the tax system.

In conclusion, the new e-invoicing system enables three major transformations in the Portuguese tax administration:

- The use of information and communication as a strategic key action tool of the tax administration, leaving for a second and supplementary action level the traditional authority functions;

- The knowledge, close to real time, of the economic functioning and of the taxable transactions carried out by businesses;
- Networking and interaction with businesses, on an equal footing and not of superiority, to promote voluntary compliance and the system's efficient operation with minimal cost.

1.9. Cost reduction for businesses

The availability of comprehensive and updated information on the AT systems regarding businesses' invoicing will exempt the latter from the submission of a wide range of documentary media statements for the monitoring of their tax obligations compliance and also from third-party.

It also enables AT to assess more quickly the refund applications from businesses, particularly when engaged in exporting activities or in investments.

Finally, AT will be able to assist companies with the filling of the periodical VAT statements and other statements related with the exercise of their business activities; to send alerts by the time of the declarations submission period and making possible their autofill.

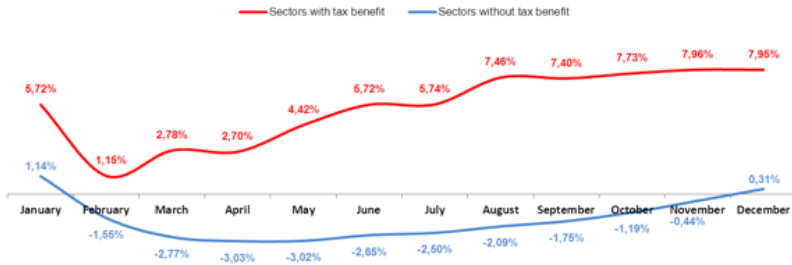
The implementation of the "e-invoice" and of the transport documents electronic communication systems provides the conditions for further increase of the use of electronic invoicing by companies, which is also an efficiency factor.

1.10. Results

Although the system is only in production since the beginning of the year 2013, VAT revenue results are already visible.

The following chart compares the variation of VAT revenue in 2013 with that of 2012 in relation to the four sectors allowing a PIT tax benefit:

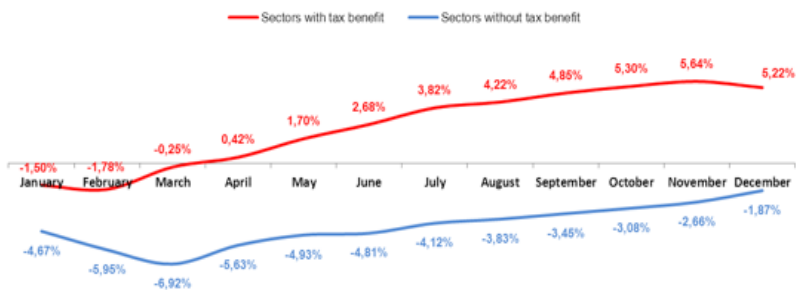
Graphic 1
Variation of Tax Revenue from VAT
monthly regimen (2013 vs 2012)



With the exception of February, the revenue from VAT paid by companies belonging to the four sectors has consistently and constantly increased.

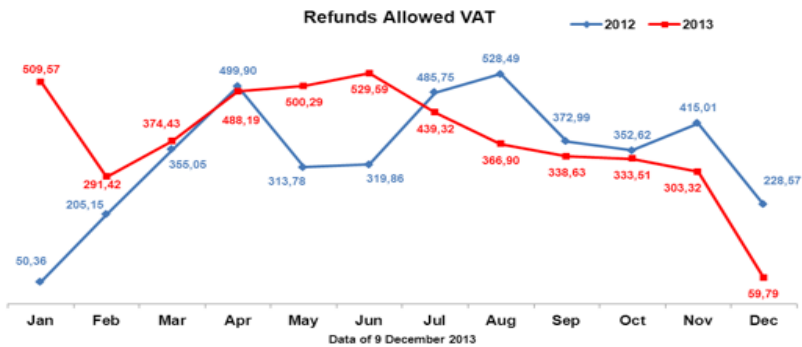
The behaviour of the tax bases has also shown the same good performance, either in the sectors with the tax benefit or in the other sectors, because as in the first set there is a base increase, even at a time of economic recession. In the second set the VAT revenue downfall is less than the drop in tax bases:

Graphic 2
Variation of Tax Basis of VAT (accumulated values)
monthly regimen (2013 vs 2012)



Regarding State responsibilities, particularly concerning the VAT refund requests and the tax credit declared by taxable persons, it can be verified that in 2013 there is a downfall trend. In particular, in relation to the authorized VAT refund amounts the following chart shows that during the 2nd half of the year the authorized refunds have been consistently below the previous year levels:

Graphic 3
Refunds allowed VAT (2013 vs 2012)



TAXPAYER ASSISTANCE CHANNELS AND PLATFORMS EXPERIENCE OF SOUTH AFRICA

Hope Tau Mashigo
Chief Information Officer
Revenue Services
(South Africa)

*Contents: SARS revenue base 2. SARS Revenue – Our 8 year Journey.
3. Business architecture. 4. Conclusion.*

PPT presentation


1. SARS REVENUE BASE

SARS Revenue Base

- 55 mil citizens
- Revenue Streams
 - Capital Gains Tax
 - Corporate Income Tax
 - Customs Duties
 - Excise Duties and Levies
 - Pay As You Earn
 - Personal Income Tax
 - Value Added Tax
 - Others
- 20 year old democracy
- 16mil individual taxpayers
- 2.7mil companies
- 40k importers
- 245k exporters
- 3k clearing agents
- 15k employees

1994/95	2013/14
Tax revenue R113.8 billion	Tax revenue R899.7 billion
Gross tax revenues 23.6 % of GDP	Gross tax revenues 26.0 % of GDP
Company Income Tax rate 40 %	Company Income Tax rate reduced to 28 %
Top marginal rate of personal income tax was 45 %	Top marginal rate of personal income tax was reduced to 40 %
Individual taxpayers was 1.8 million	Individual taxpayers 16.8 million
CIT taxpayers 456 000	CIT taxpayers 2.7 million
PAYE registered employers 178 000	PAYE registered employers increased to 407 000
VAT vendors 455 000	VAT vendors increased to 662 000 as at January 2014

Exchange Rates - Oanda - 29 April 2014		SARS Revenue
South African Rand to	US \$	R 899 700 000 000
1	0.09392	\$84 499 824 000
South African Rand	Euro	€ 61 026 651 000
1	0.06783	
South African Rand	Brazilian Real R\$	R\$ 188 919 006 000
1	0.20998	



SARS South African Revenue Service

The South African Revenue Service (SARS) is the Tax and Customs administration authority of the South African government mandated through the SARS Act (No.34 of 1997). SARS is mandated to:

- Collect all revenues due
- Ensure optimal compliance with tax and customs legislation

- Provide a customs service that will optimise revenue collection, protect South Africa's borders and facilitate legitimate trade

SARS is central to the functioning and sovereignty of the young democracy which celebrated its 20th anniversary last week. This young democracy boasts of a population of around 55 million.

From a tax and Customs perspective, with 15 000 employees, SARS currently service the following stakeholders:

- 16 million individual tax payers
- 2.3 million Companies
- 40 000 importers
- 245 000 exporters
- 3 000 clearing agents

SARS over the years collected more revenue to ease the government debt burden. It collected R899,7bn in the 2013/14 financial year and this trend is expected to rise.

2. SARS REVENUE – OUR 8 YEAR JOURNEY

All Taxes		2006	2013	
Number of returns received electronically		1.6m	22.5m	
% electronic submissions to total returns		8%	98%	
Payments processed electronically		R55bn	R759bn	
%electronic payments to total revenue		13%	93%	
Personal Income Tax (PIT)		2006	2013	
Number of returns filed electronically		120k	6.7m	
eFiling	120k	3%	3.8m	58%
Branch Interface (Service Manager)	0%	2.9m	41%	
% electronic returns received		3%	99%	
Number of manual returns received		4m	10k	
Average assessing turnaround times		45-55 days	91% within 3sec	
Average refund turnaround times	70% with 24hrs*	* Depending on Bank Processing		



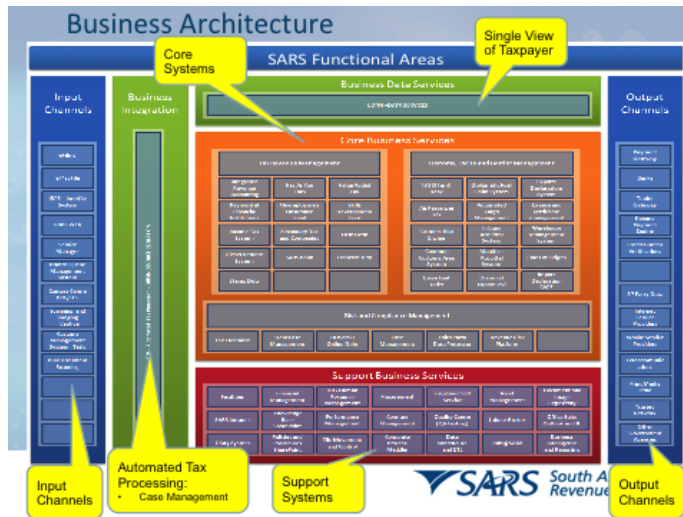
The democratisation of South Africa presented an opportunity for SARS to strive for high achievements. Good strides were made over the period. Over the 20 years a tax system has been built on the principles of equity, efficiency, simplicity, transparency and certainty. Since 1994/95 tax revenues have increased through a broadened

tax base and tax rates have been reduced. The table above indicates movement:

Resilient and accountable institutions

- Administrative autonomy was given to the Commissioner for Inland Revenue and the Commissioner for Customs and Excise in 1997 and hence the formation SARS during the same year.
- Establishment of the SSMO in October 2002.
- Newly established Office of the Tax Ombud in 2013 and formally launched in April 2014.

3. BUSINESS ARCHITECTURE



3.1. Input Channels

These are the service channels that SARS provides to conduct business and communicate with its taxpayers and traders. Based on the nature and the environment in which taxpayers and traders operate, these channels could take the form of internet-enabled channels (such as e-filing, e@syfile) or branch network environment enabled by (Service manager, Branch Queue Management System) or the Contact centre (enabled by the Interactive Voice Recorder).

For example: A taxpayer or trader might initiate a communication with SARS through a branch network, Contact Centre, Mobile Tax Unit or through e-filing or E@yfile depending on the nature of the transactions and the channels that are available to that taxpayer or user. This

communication will be directed to the appropriate core business environment through the business integration / orchestration layer (ATP), after having being verified with the User Data Master (U3TM).

Business integration

While SARSS offers its taxpayers and traders various channels of communication, it is imperative that at the end of the day, those channels are aligned to the backend business processes. That is, whether a taxpayer or trader communicates via the contact centre or the branch network, the requisite information should be transformed

This is made possible by the Automated Tax Processor (ATP). This could be viewed as the backbone or the orchestrator of all the SARS operation because it is in this layer that the business rules are stored. For example, in a case where a tax return is being filed, the rules engine within ATP will determine whether the return is a duplicate or not, and if so, flag it for further action where necessary.

For example: If a user contacts SARS using the Contact Centre, after they have been positively identified, ATP will provide the requisite information for that particular tax payer from the Core Business Services layer to the agent's Graphic User interface, to aid the agent with providing a better service to the client.

Such information could be when his / her refund will be paid or a help with his e-filing password. What is important to note here is that ATP communicates with the Core Business System for the appropriate core business information.

Business data services

While SARS have various products and services that it offers to its tax payers and traders, it is imperative that the identity of each tax payer and trader is maintained throughout the service offerings and interaction. This enables SARS to be able to provide a credible service to its clients in the most effective and efficient way. Without this uniformity in identity, SARS would not be able to get a holistic view of its tax payers and traders.

The Unified Taxpayer, Trader, and Travel Master (U3TM), is the key layer that offers that identification and authentication. Each tax payer, trader and traveller is uniquely identified and authenticated through U3TM. This resolves the issue where a single tax payer or trader is

given a refund when on the other side; the same tax payer owes SARS because of their identity that is stored differently in various business systems. However, the U3TM offers the opportunity of identifying the taxpayers uniquely. One other major advantage of the U3TM is risk management in that tax payers and traders are identified and authenticated upfront.

So in a nutshell, U3TM can be regarded as a single platform for user registry for all SARS clients and products and services. If the user is not known in U3TM, that user does not exist. So before a service can be provided to any tax payer or trader, they should be identified through U3TM failing which no service will be provided.

Core business services

This layer indicates the core of the SARS business operations. It indicates the various business products and offering from SARS. Such offerings include the various tax and customs types that SARS administers, such as Income Tax, Pay – As - You - Earn (PAYE) and Value Added Tax (VAT) on the revenue stream, Passenger Profile System (PPS), Warehouse Management System and Rules of Origin (ROO) on the Customs stream. This is where the specific product/service offering data are stored. Such data will be communicated to the requester of the service through the business orchestration layer (ATP) after having been authenticated through U3TM.

With the use of the ATP and U3TM layers, it becomes easy to identify and allocate transactions accurately, to the correct tax payer and the correct service offering or product. The use of ATP and U3TM has eased the burden where tax payers and traders paid for multiple products or services in one bulk payment and the other problem where tax payers and traders paid with incorrect information and such payments could not be apportioned correctly resulting in an accounting nightmare for SARS.

ATP is able to flag that payment immediately and route it for immediate attention. The benefit of this audit at source has meant that SARS is able to account for its revenue with ease.

It is important to note that, the Core Business Service Layer of this architecture retains the specific transaction data of that particular core business system. That is, VAT transaction data will reside in the VAT system, while the IT data will reside in the IT system. It is through the orchestration layer (ATP) that that information will be relayed to

the requester after having been authenticated by U3TM and profiled accordingly by the Risk Engine

Risk and compliance management

While the technology enabled capabilities have brought good benefits to the organisation, the focus on risk management has increased. SARS has an Enterprise Risk Engine that manages risk in both the Revenue and the Customs arena. The risk engine focusses more on the following:

The nature of transactions

- The risk engine, based on the risk threshold limits that are set, determines whether a transaction is risky or not, and flags it accordingly. For example, if a particular trader uses certain ports of entry (PoE) for his cargo, and suddenly changes routes for the same, such a transaction might be flagged as risky and that cargo might be stopped for inspection as a risk management action. If the stop results in a positive search, that is, it is found that there was indeed something untoward with the cargo, the profile of the trader is amended accordingly and where necessary, business risk rules are also amended to include the new evidence of the case.
- In a revenue environment, an assessment of a particular tax payer might trigger further action on that assessment based on the profile of the taxpayer or information that resulted from that particular assessment. It could be a combination of the transaction itself and the profile of the person who initiated the transaction.

The nature of the tax payer and the trader

- The advantages of U3TM are carried forward to the risk engine through the identification of delinquent taxpayers and traders. So their transactions are flagged accordingly for further actions.
- The risk engine also aids in profiling users of the SARS products and services offering. As they interact with SARS from time to time, a profile is built indicating their worthiness. This profile will become hands in the handling of transaction from that particular user.
- The use of the Enterprise Risk Engine has eliminated the use of gut feel for risk management. It has also removed the subjective nature of human beings in managing risk. What is more important is the continuous update of the thresholds and other business risk rules as operational demands dictate.

Use of third party data

- The importance of third party data in a Tax and Customs Administration cannot be over emphasised. Third party data has contributed significantly in the collection and validation of taxpayer and trader data that was not available or inaccurate in the past. The use of third past data has played a significant role in user identification and authentication and the profile of those users.
- The availability of third party data has also helped in broadening the tax base in that tax citizens who were not in the tax base are identified and subsequently included. Within the SARS environment, third party data sources include banks, insurance companies, and employer organisations amongst others.

Support business services

This layer can be divided into two main categories, namely, employee support services as well as business support services. SARS employees provide a service to their tax payers and traders, and therefore it is important to offer them the support required to provide an optimum service to their clients. Such support can be in the form of the Intranet, where their Standard Operating Procedures (SOPs) are stored in the various knowledge bases.

From a business operations point of view, SARS has to account for both the revenue collected as well as the expenses incurred during the collection of that revenue. So the financial system, in this case SAP, is important to provide that financial management capability. The implementation of SAP has eased the burden of revenue accounting within SARS. In the past, SARS battled with the proper accounting of revenue collected on a per product basis because there were no systems available resulting in taxpayers' accounts not being properly updated. While the revenue was collected, it could not be properly accounted for from a product point of view.

So the implementation of SAP has gone a long way in alleviating this challenge.

3.2. Output channels

This layer can be viewed as the opposite of the input channel layer, in that, this is the layer through which SARS responds to transactions that were initiated at the input channel. Such response could be the acknowledgment of a service or product user, the confirmation of a filed

tax return, the payment of a refund due to a tax payer , confirmation of data received from a third party data source, confirmation a payment made by a tax payer or trader at a bank.

Taxpayer channels

Taxpayer Channels

Primary Modernized Channels:

- Online (Internet)
- Phone – Contact Centers
- EDI (Electronic Data Interchange) – Customs
- Mail (Snail) – Scanning / OCR – Workflow/Case
- Branch (Walk in) – Service Manager / BQMS (Branch Queue Management System)
- Facsimile (Fax)
- Email

Supporting Channels:

- Mobile Offices – 12 Vehicles
- Direct Engagement - Large Business Office – LBO
- Media Advertising – Website, TV, Billboards, Radio

Supporting 3rd Parties:

- Bulk file interfaces
- Integrated Case Management
- Banking Integration – all major and most mid tier banks –

SARS South African Revenue Service

The streamlining of processes contributes to shorter service turnaround times and better service. As described above, SARS believes that better service encourages voluntary compliance. SARS aims to reduce compliance barriers for taxpayers and traders, through ensuring greater accessibility to service points and channels, and providing a range of simpler ways of engaging with the organisation and complying with tax and customs requirements. In addition, SARS will, in partnership with the Department of Trade and Industry, National Treasury, Statistics South Africa and other government departments, develop a single business registration process to reduce compliance costs for new businesses.

Through continued modernisation of processes and systems, SARS is reducing the unit costs associated with the processing of large volumes. Modernisation will continue to free up resources for reallocation to additional or under-resourced functions, such as customised services to various taxpayer and trader segments, and more extensive outreach and education interventions. Weaknesses that currently impact negatively

The taxpayer/trader's ease and fairness of doing business with SARS are being addressed by:

- Segmenting the requirements of specific categories of taxpayers and traders in order to provide a service appropriate to taxpayer/trader needs
- The application of risk based processing which avoids the need to examine every taxpayer/trader or every transaction in favour of those where a high risk of non-compliance is detected. This speeds up service delivery to 90-plus percentage of taxpayers and traders for whom little risk is identified
- Reducing manual paper based processes to electronic digital and self-service channels resulting in quicker processing with fewer errors
- Reducing long and complex forms into dynamic flexible forms suitable to the specific requirements of the individual taxpayer/trader
- Reducing multiple forms/applications into single forms/applications (e.g. registration) and
- Reducing errors and the administrative burden on taxpayers and traders by pre-population of forms from third party data, resulting in quicker processing with fewer errors

Web-enabled channels

Web - enabled channels

- Registration
- eFiling – PIT, CIT & VAT
- Mobile Filing – PIT
- E@syfile - PAYE
- EDI – Customs

Enabling Technology Platform

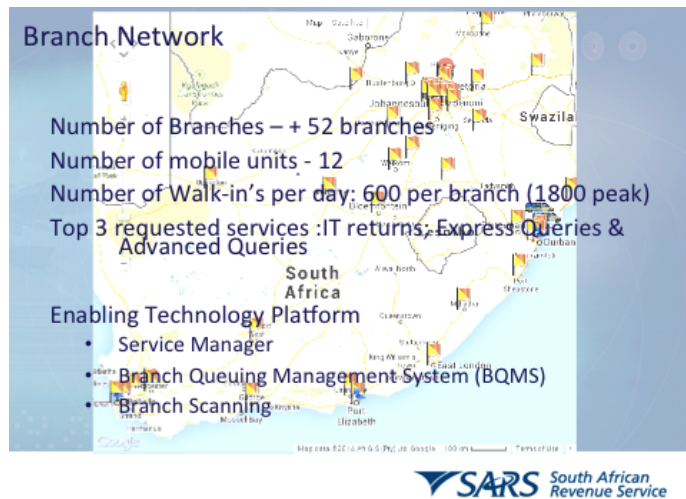
- AS2 – AS3
- Electronic Dynamic Forms
- Mobile devices for inspections
- Automated Tax Processor (Business Integration Layer)

SARS South African Revenue Service

It is through the adoption and leverage of technology in its business operations that SARS has realised so much return. The adoption of technology has resulted in SARS broadening and deepening its tax base, while at the same time improving on its service offerings. The adoption of web-enabled service channels has enabled SARS to provide a service not limited by geographic and time boundaries.

While Web-enabled service channels have made a huge relief to the branch network, where the network enabled service channel is unavailable or there are challenges faced by the tax payer or trader, the branch network or the contact centre can be utilised to resolve those challenges.

Branch Network



SARS has a physical branch network consisting of fifty (50) branches. This number is expected to grow as the organisation strives to minimise the compliance burden for all tax payers and custom traders.

While the branch network has been predominantly in the urban areas due to the past history of the country, that trend is slowly changing as branches are being built to service the so-called rural communities.

With the major technology enabled initiatives that SARS has embarked upon over the years, there is less reliance on the physical branch in most urban areas. However, where there is still activity at physical branches, the major services required by tax payers and traders are the following:

- Income Tax (IT) returns
 - Express Queries
 - Advanced Queries
- It is not surprising that the average number of Walk-ins per day is 22. This demonstrates the adoption of other technology –enabled service channels.

The branch network is enabled by the following technologies:

Service Manager: A home-grown business system to manage business services

- Branch Queuing Management System (BQMS): To manage the queues within the branches
- Branch Scanning: A technology enabled capability to digitise taxpayer and trader information. This has enabled SARS to minimise user errors and lost documentation.

Over the course of this strategic planning cycle, SARS will seek to ensure that the reality of fiscal citizenship is gradually realised through exploring the following initiatives:

- Improve access and availability of SARS services to the entire citizenry wherever they might be by:
 - Intensifying deployment of mobile registration teams to areas of economic activity to register businesses and eligible individuals
 - Increasing the use of mobile devices as a way of improving SARS accessibility to taxpayers and traders and potential taxpayers and traders
 - Increasing presence of SARS mobile offices to take services to areas that are geographically remote from current SARS offices
 - Bringing all economic activity within SARS purview even if there is no revenue to be derived from it
 - Bring all informal businesses, including immigrant businesses, into the formal sphere in collaboration with the Department of Home Affairs, Municipalities and CIPC, through a simplified registration process and a single business registration platform
 - Increasing engagement with all citizens even if there is no revenue to be derived from it
 - Increasing collaborations with other government departments including Home Affairs, Social Security Services and the Company Intellectual Property Commission
 - Improve contact by minimizing the distance between SARS and the recipient of SARS services through:
 - Review of SARS branch footprint and identification of areas in the country that require new points of presence (traditional branches, mobile branches and possible shared locations) to increase reach and enable SARS to better service and educate taxpayers and traders and potential taxpayers and traders. This will be done in order to move towards the goal of having a SARS branch no further than 80km from any taxpayer/trader
 - Entering into strategic collaborations and partnerships with other government departments in order to ensure SARS presence around the country is increased.

Phone in – Contact Centres

Phone in: Contact Centres

4 Contact Centers

Service hours: 08h00-17h00 daily 653 Agents, 50 inbound calls per agent per day

Top 3 requested services : Request for tax numbers, Login password reset, Refund date

Enabling Technology Platform

- Service Manager
- Voice
- Help – You - eFile
- Fail-over capability

SARS South African Revenue Service

The creation of contact centres has eased most of the pressures previously experienced through the branch networks. SARS has both in-bound as well as out-bound contact centres. The contact centres has contributed meaningfully in the provision of service to taxpayers and traders and as well as achieve the stated revenue target for the organisation.

SARS has four contact centres. From the organisations point of view, the contact centres are used to remind taxpayers and traders of their outstanding obligations and follow-ups in terms of payments due.

From a taxpayer and trader perspective, the contact centres have been used to complement the services provided by other technology-enabled platforms such as electronic filing. The contact service hours are aligned with those of the branch networks. They operate from 08h00 to 17h00 daily except Wednesday, where they operate from 09h00 till 17h00 to coincide with the branch network service hours.

The four contact centres are manned by 653 agents who work on a rotational shift basis. On average, each agent attends to 50 inbound calls per day. Most of the services requested at the contact centres are:

- Request for tax numbers
- Login password reset
- Enquiry about the date for a refund

The underlying technologies enabling the contact centres are the following:

- Service Manager
- Voice technologies
- Help- You-eFile

It is also worth noting that the four contact centres are set up to provide a fail-over capability in that should one contact centre be unavailable, the services are routed through to other operational contact centres. This is done seamless to the taxpayer and trader.

The contact centre is also meant to complement other taxpayer and trader channels.

4. CONCLUSION

Conclusion

- 8 X Revenue Growth in 10 years
- Paperless, quick turnaround time
- High availability, continuously updated security, proven reliability, high integration
- Optimised effort. Focus on compliance
- 24/7 365

African Proverbs
 "If you want to go fast; go alone. If you want to go far; go together."
 "Speak softly and carry a big stick; you will go far."

SARS South African Revenue Service

- Our journey to electronic processing has been enormously beneficial – 8 X Revenue Growth in 10 years
- Our primary channel is now electronic submission – 98%
- Automated Processing – PIT within 3 Sec
- Got rid of the paper - it's not needed
- Our systems are now highly integrated and as such the reliability and availability of systems is key
- Key to our success has been making it "easy" - immediate response and service

TOPIC 2.2 (South Africa)

- Taxpayer adoption has been key – the service we provide is appreciated and recognized
- We are now able to focus our efforts on compliance and where required enforcement
- We are now more like a bank – 24/7 365 and this has changed our landscapes and operational requirements significantly

TAXPAYER ASSISTANCE CHANNELS AND PLATFORMS EXPERIENCE OF PEOPLE'S REPUBLIC OF CHINA

Lan Song

Deputy Commissioner
State Administration of Taxation
(People's Republic of China)

***Contents:** Summary. 1. Introduction. 2. Channels and platforms to provide services to taxpayers. 3. The spring breeze campaign to facilitate taxpayers ("SBCFT"). 4. Conclusion.*

PPT presentation

SUMMARY

In recent years, Chinese tax authorities keep improving the tax service system by upgrading various channels and platforms, including taxpayer service halls, online tax filing, tax hotline, self-service tax machine, etc., aiming to provide convenient and efficient services to the taxpayers.

In early 2014, for the purpose of making taxpayers more convenient, Chinese tax authorities began to carry out the national wide Spring Breeze Campaign to Facilitate Taxpayers ("SBCFT"). The activities in the campaign include improving the efficiency in tax services, relieve taxpayers' burden etc.

1. INTRODUCTION

During the recent years, in order to satisfy the requirements of the taxpayers and improve the compliance level, Chinese tax authorities have focused on the establishment of "Comprehensive Platform" through new information technologies. The Platform mainly include set-up of standardized taxpayer service halls, professional hotline services, self-service tax terminal, mobile tax services, SMS platform, taxpayer's academy and application of new media, etc.

Chinese tax authorities are aiming to provide the most suitable option for the taxpayers to meet their own requirements, enhance their consciousness on tax paying, increase their attention on tax service and participation in taxation activities.

2. CHANNELS AND PLATFORMS TO PROVIDE SERVICES TO TAXPAYERS

- **Tax service halls**

From the middle 90th of the last century, Chinese tax authorities began to provide face-to-face tax services by establishing the taxpayer service halls. After years of efforts, Chinese tax authorities have built 10,643 physical tax service halls. These taxpayer service halls are multi-functional and equipped with 80 thousand tax officers providing various services, such as tax registration, tax invoice purchase and verification, tax filing, settlement of tax payment, etc.

- **Online tax service**

Chinese tax authorities also have established online tax service system at provincial level, which provide basic functions of tax service, such as publish tax policies, tax compliance service, protection of taxpayer's rights, tax credit rating management, etc. Online tax service systems also improved the interactive functions, such as Q&As, collection of feedbacks and suggestions from taxpayers, acceptance of complaints etc.

In addition, the systems further extend their functions on online tax filing, online settlement of tax payment, online invoice issuance, which facilitated the taxpayers in many ways and allow them to complete these tasks without visiting the tax bureaus. In 2013, nearly 80% of the enterprises in China chose to use online system for tax filing. It is estimated that at the end of 2014, proportion would rise to 90%.

- **Tax service hotline “12366”**

70 provincial tax authorities in China have set up their “12366” call centers under the requirement of SAT.

In April 2014, national call centre of “12366” is officially launched in Beijing, which aims at providing service to taxpayers all over the country. National call center is also responsible for providing technical support to provincial call centers, as well as managing and supervising the provincial centers' operation.

Currently there are nearly 3,500 staff working at all levels of call centers, including 2,400 staff working as front-line operators (accounting for nearly 70% of the total number). In 2013, the 12366 call centers have received 30.88 million calls from taxpayers. 16.34 million calls are dealt with by our front-line operators.

- **Self-service machines**

Chinese tax authorities have placed 5,601 self-service tax machines in taxpayer service halls, some bank branches and other business centers, which provide the service of tax filing, tax invoice purchase, enquiries and other supporting services.

- **Mobile tax services**

The statistics from the Ministry of Industry and Information Technology ("MIIT") show that there are over 1.1 billion Mobile subscribers in China. How to take full advantage of the mobile communication technology to serve taxpayers is a key concern in China. In 2012, OECD taxpayer service team has also included the promotion of mobile communication system for tax services as its major task.

Since the year of 2013, some local tax authorities in China have begun to use smart phones to provide services for taxpayers, such as policy advisory, tax invoice checking, guidelines, announcements, respond to hot tax issues, etc.

In December 2013, MIIT officially issued 4G mobile licenses to the 3 major mobile operators in China (i.e. China Mobile, China Unicom and China telecom), marking China's formal entry into the 4G era. It is anticipated that, by the wide usage of 4G technology and mobile communications systems (e.g., smart phones), China would experience a rapid development on mobile tax services in the future.

- **SMS platform**

Chinese tax authorities fully use the service gateway of SMS by sending as many as 190 million messages to deliver the tax alerts, notices and policy updates, etc. to the taxpayers.

- **Taxpayer's academy**

Chinese tax authorities have built nearly 2,600 classrooms for taxpayers by fully utilizing office buildings and public facilities to

provide tax-related training. In 2013, 2.86 million taxpayers have been trained in taxpayer's academy. Meanwhile, Chinese tax authorities also established 2,500 online virtual schools, providing tax-related trainings.

- **Application of new media**

Chinese tax authorities have registered 1,300 official Weibo accounts (similar to twitter) and released 320 thousand messages in the year of 2013. They also registered 8,500 Tencent's chat communities (similar to MSN) and proactively interact with taxpayers through WeChat, Yixin Chat messenger (similar to whatsapp) and other emerging instant communication applications.

- Establishment of comprehensive platform for supervision and administration of tax services ("comprehensive platform")

Chinese tax authorities are now carrying out the Phase III of the Golden Tax Project with great efforts. Chinese tax authorities are aiming to build a comprehensive platform to administer, supervise, and analyze taxpayer service activities.

Through this comprehensive platform, Chinese tax authorities would timely deliver the taxpayer's enquiries, feedback on experience of receiving tax service and behavior preferences to the relevant in-charge tax departments, which helps to improve the efficiency and quality in tax-related affairs.

3. THE SPRING BREEZE CAMPAIGN TO FACILITATE TAXPAYERS ("SBCFT")

In order to facilitate taxpayers, satisfy their requirements, as well as improve compliance, Chinese tax authorities have launched the Spring Breeze Campaign to Facilitate Taxpayers ("SBCFT") since February 2014.

The SBCFT focuses on bringing convenience to the taxpayers and it represents the core value of "serving taxpayers". SBCFT is a key measure designed by Chinese tax authorities to enhance the service-oriented government functions, and streamline administrative procedures. Also, SBCFT plays a particularly role to build a harmonious relationship between Chinese tax authorities and taxpayers.

The detailed implementation plan of SBCFT would come out in batches to bring the convenience to the taxpayers. China tax authorities would closely monitor and supervise the status of implementation plans and summarise the experience and lessons accordingly.

The detailed implementation plans of SBCFT have been made by Chinese tax authorities, including releasing the full list of tax administrative approval items, improving efficiency in tax services, implementing the policy “Who receives the request, who follows to the end”, relieving taxpayers’ burden, promoting tax compliance, an releasing of the full list of tax authorities’ entitled enforcement power, etc. It is believed that these actions will help to improve work efficiency and solve potential problems when tax authorities are providing taxpayer service.

Chinese tax authorities.

4. CONCLUSION

Chinese tax authorities have made remarkable progress in providing taxpayer services.

The tax authorities would initiate more innovative and targeted measures to strengthen the taxpayer service system in the future to benefit the taxpayers, as well as bring various service products to the taxpayers.

ELECTRONIC FILING OF PAY-AS-YOU-EARN (PAYE)

Wayne Forde

Director of Shared Services
Revenue Authority
(Barbados)

Contents: Introduction. 1 Brief overview of Barbados. 2. Electronic filing in Barbados. 3. Recommendations and conclusions.

INTRODUCTION

General Framework

The subject under discussion is Electronic Filing in a PAYE environment. In discussing this topic, special focus has been concentrated on the Barbadian experience and the perceived advantages and disadvantages which were encountered in setting up this system.

The age of technology has overwhelm our lives to the extent that the once touted and reliable paper based mailing systems has been rendered virtually redundant and replaced by the electronic mail or email, where practically every individual worldwide possesses an email address and in some cases more than one.

The internet has become an essential ally in our everyday existence where it has evolved from being a luxury to being the necessity for life. The smartphone and the tablet is a vital part of our armoury where people do not leave home without them.

It is therefore not surprising that the introduction of electronic filing would have been introduced as a matter of choice throughout the tax paying world. Electronic filing is a fairly recent phenomenon worldwide. The Internal Revenue Service of the United States (IRS) introduced form of electronic filing in 1986 some twenty eight years ago, with the primary goal at that time being to lower operating costs and paper usage.

1. BRIEF OVERVIEW OF BARBADOS

Barbados is a relatively small jurisdiction both in terms of physical size and the size of the population. The total population of the country is approximately 280,000 people and approximately 50% of this population account for the total labour force. This total includes self-employed and employees and many who would not be considered as PAYE candidates, which is the subject of this discussion. The amount of workers who would therefore remit their taxes through the PAYE system is approximately 25% of the total labour force or around 35,000.

'Pay As You Earn' more commonly referred to as PAYE is a withholding tax, whereby the tax is deducted from the employees' salary or wages by the employer and paid over to the state. PAYE was introduced in Barbados in 1957 and over the years, it has seen many changes and amendments. Currently every employee who earns a wage or salary of more than US\$240.50 per week or US \$1041.50 per month is liable to PAYE.

Tax on the earnings of employees is conducted under a non-cumulative Pay As You Earn system. An employee, during his term of employment is entitled to file a declaration form with his employer claiming the personal allowances to which he is entitled. These allowances can include both personal and children. The employer in turn deducts tax for each pay period with reference to the appropriate tax bracket and the allowances claimed. Each pay period, whether on a weekly, bi-monthly or monthly basis is treated separately, and therefore the cumulative pay and tax deductions are not taken into consideration. If there is an outstanding balance of tax owing, this would be shown on the annual tax return which must be filed by the 30th April of the following year.

Conversely, if the tax has been overpaid, the employee is entitled to a refund on the paid. Reverse Tax Credit In Income Year 2009, employed individuals who earned less than US \$9,000 per annum enjoyed the benefit of a grant of US \$650. Bear in mind that other individuals are granted a personal allowance of US \$12,500 per annum while pensioners age 60 and over are exempt from tax on the first US \$20,000 of their annual income. It would be recognized that those individuals who earned less than US \$9,000 per annum would not have been required to pay income tax and therefore could not have enjoyed a refund. As stated above, those benefitting from the reverse tax credit would not have been included in this category

2. ELECTRONIC FILING IN BARBADOS

Electronic filing in Barbados is a relatively new undertaking. This feature was first introduced in 2009 and is envisaged to replace the paper based filing system which has existed from the inception of Income tax. This system was touted as an improvement on the manual system of filing and would ensure that there was more accuracy and transparency in the system. Further it would guarantee that the returns would be processed in a timelier manner.

This saw a quantum leap from the old system to the new one.

There are three major players in the submission of income tax (PAYE). These are

1. The Employee
2. The Employer
3. The Third Party Providers

Under the previous paper based system, the following steps had to be taken.

- **The submission of the employee declaration form**

All employees must complete this form. It allows the employer to determine the relevant tax bracket under which the employee will be assessed. Each employed person is entitled to a basic starting allowance of \$12,500. This figure can increase depending on the amount of the allowances that person has claimed. The tax bracket enables the employer to deduct the correct amount of tax from each employee

- **The PAYE tax deduction remittance form by the employer**

After taxes have been deducted from all persons liable to tax the employer is obligated to pay all sums over to the state on or before the 15th of the month following the month in which it was deducted. This form is used to remit all sums to the Authority. Employers must include their Account Numbers to facilitate that the sums remitted are placed on the correct account.

A Tax Tables Booklet was prepared for the use of all employers. This contained a set of instructions to each employer. These instructions were designed to assist the users in deducting the correct amount

of tax. They will also advise the employer what amounts are taxable, what amount must be deducted for the month from the employee and how to account for the amounts deducted.

It is important to note that persons who are employed with more than one employer would complete and file one Employee Declaration Form only with the employer of his or her choice. The employee will not be entitled to any allowances in the deduction of P.A.Y.E. from the second employer. Any adjustment will be made at the annual filing time.

- **Third party providers**

In determining the amount of allowances that a tax payer was entitled to, he or she would have been required to submit to the Authority on filing, evidence that he had engaged in an activity that allowed him a benefit. These has included

1. Interest paid on residential mortgage loans.
2. Allowable savings at certain financial institutions.
3. Insurance premiums for property
4. Pension plan contributions and withdrawals
5. Mutual fund purchases and withdrawals
6. Purchaser of shares in public companies
7. Social security benefits
8. Information on other taxable transactions, such as withholdings and remittances.
9. Contributions to charities and other covenants.

The introduction of E-filing has eliminated most of the errors that were long associated with the paper base filing system and has seen increased efficiency in the processing of returns.

The PAYE Tax Deduction Remittance Form previously referred to, has been eliminated and replaced by electronic uploading of the information. This has seen a marked reduction in paper used and resources required to input these information into the system, It has therefore meant that human resources can be deployed to other areas where there are more required.

The direct uploading of third party information has by far been the most derived benefit for the tax departments. As previously alluded to, the third party information was submitted on filing to the department, by the taxpayer.

By ensuring that the information from the third-party providers is submitted directly to the Authority, it has eliminated instances of over stating and creative submissions that has plagued the system over the years. It however was not without its challenges. This has incurred in those instances where the Third Party Provider has failed to file the correct information or to provide the correct Tax Information Number.

The systems has eliminated the need to consult tax calculation tables, as the calculations are performed seamlessly and has the facility to calculate whether the taxpayer is liable for paying or is entitled to a refund.

3. RECOMMENDATIONS AND CONCLUSIONS

Recommendations

With the many technological advances being unleashed on the public, it is essential that the state agencies remain on the cutting edge for greater efficiency.

Currently the smartphone is gaining ascendancy over other instruments of transmission. It is therefore vital that the working screen size is adjusted to accommodate that small size.

The agencies must ensure that there sufficient computing capacity during the filing period. During the filing period, a greater bandwidth is required to ensure that the taxpayers are able to access the System.

The agencies must ensure that the electronic form is easy to understand and complete. In the past, especially with the paper based systems, the forms have been fraught with complexities and intricacies that only “experts” can decipher.

A greater partnership must be established with the third party providers. They must be registered and frequent contact should be kept to ensure that there is compliance in submitting the information.

In the most cases, the majority of person filing in the PAYE system expect to receive a refund. Incentives can be offered to “reward” those early filers with speedy returns. However, facility must be put in place to ensure that persons can pay their taxes electronically at the same time.

There is a need to ensure that there is customer confidence in utilizing the system. Therefore security must be paramount in maintaining the system. We must exercise a greater degree of vigilance especially in these troubled times of computer breaches and identity theft. It is vital that the filing systems are secure and offer a greater sense of confidence for the users of the programmes.

Conclusions

It is without question that there are many benefits to be derived from the introduction and maintenance of an electronic filing system in the PAYE system.

We have identified considerable savings in monetary terms, in time management and in human resource allocations. We have noted that by replacing the physical paper based files with electronic copies, there would be reliable storage and by extension, a speedy retrieval of electronic information. It is without question that there would be a reduction in data capture errors, which result formerly from officers having to physical key in the information after it has been submitted.

There is an obvious savings from eliminating the need for stationery and the use of the traditional postal services. There is also the added environmental benefit in going to a paperless office.

We have also observed in the few years that the system has been in place the speedier processing times which have been available to tax payers. This has led to an improved customer service and customer relations, and it has been reinforced by the availability and dissemination of online taxpayer education.

From an administrative viewpoint there would be an enhanced and improved tax administration. There will be increased vigilance and this would include the detection of non-compliance and tax avoidance which are still prevalent in current systems. This will be achieved in collaboration with the expansion of third party information. It would therefore be easier to capture those potential taxpayers who now "fly below the radar".

If this discussion was made a few years ago, we would have alluded to electronic filing as the preferred mode of submission of the future. We can now say with all assurance that the future has come and this is now the preferred system of the present and going forward. We can only improve on this mode of transmission.

TOPIC 3

**INFORMATION AND COMMUNICATION
TECHNOLOGIES AND TAX
CONTROL**

THE USE OF “BUSINESS INTELLIGENCE” FOR TAX CONTROL PURPOSES

Brian McCauley
Assistant Commissioner
Revenue Agency
(Canada)

Contents: 1. Introduction. 2. Corporate Foundation. 3. Integration. 4. Application. 5. Conclusions.

1. INTRODUCTION

1.1 Background

Similar to other tax administrations, the Canada Revenue Agency (CRA) collects, produces, and stores vast amounts of data. Across our organization, we maintain roughly 450 databases containing hundreds of thousands of data elements. In addition, we maintain over one thousand tax forms and information slips. The central challenge in Business Intelligence (BI) is largely one of how best to access, integrate, and analyze the data that already exist to create actionable knowledge and insights.

Between the late 1990's and early 2000's, we established a Business Intelligence and Decision Support program, and made key investments in the development of a new data environment to support BI, including a data warehouse and numerous data marts, as well as end user tools and enabling technologies.

In the beginning, we mainly used BI for reporting purposes, with a focus on performance reporting and monitoring. We reviewed standard reports to learn how well we were doing relative to our targets, but more advanced analysis was limited. At that time, our BI efforts and capabilities were internally focused rather than taxpayer focused: the goal was managing internal processes.

We then started to explore what BI could tell us about taxpayer behaviour

and how we could use that insight to improve compliance and service. Initial efforts, often successful and essential in the developmental process of our BI story, were carried out in isolation from one another. Rather than seeking to understand and analyse the full taxpayer lifecycle, projects were conducted on specific milestones in the cycle and the analysis considered only the data that related to that specific touch-point (e.g. call centre contacts or compliance audits). Over time we recognized that this fragmented approach did not account for the possible interdependencies between all touch-points in the taxpayer lifecycle and didn't allow us to consider important questions. For example, without the ability to understand the behaviour of taxpayers throughout the entire process, it is difficult to assess how to improve upfront interactions to reduce after-the-fact checking. We realized that, in order to draw the maximum value from our BI efforts, we needed to consider the full lifecycle and design horizontal, rather than tactical, analytical approaches. With a horizontal view, we can more readily make inferences to inform the creation of evidence-based strategies that allow us to manage our relationships with taxpayers holistically and sustain compliance over time. Each of our interactions with a taxpayer is an opportunity to influence his or her behaviour, and ultimately compliance, and advanced BI will help us make the most of these interventions. Although BI also has other applications, such as customizing service offerings according to taxpayer need, this discussion focuses on its application to compliance.

Having identified important potential benefits of a more enterprise-wide approach and investment, we conducted internal consultations to articulate the business case. One of the interesting things that we learned was that BI analysts reported 50% to 80% of their time was spent looking for and understanding data. This pointed to a critical need to ensure that we have the right foundation in place to support an efficient and effective BI capability. We are now working towards an integrated approach to BI and are developing a BI Strategy that will chart the CRA's BI goals and priority initiatives.

1.2 Purpose and Scope

The purpose of this document is to share our organization's experience with BI, as well as some of the lessons we have learned. As technology advances and our capabilities mature, we are moving towards an increasingly integrated, enterprise approach to BI.

We hope that our peer administrations in CIAT will find this document helpful as they implement and adapt BI concepts to their own tax administrations' context.

We have organized our account into three key elements: our corporate foundation, integration, and the program application of BI. Specifically, it first discusses how we are working to build the right corporate foundation in order to support an advanced BI capability. It follows with how we are working to integrate the components of that infrastructure, along with two examples of how we are applying it.

1.3 Key Terms

Some of the key terms used throughout this document are:

Analytics: Analytics typically involves the use of data mining and statistical modelling techniques to uncover meaningful correlations, patterns, and trends in data. It brings together data from many sources to create actionable information, such as prioritization, risk scoring, and assessments to support decision making. It may be descriptive, diagnostic, predictive, and even prescriptive in nature.

BI Tool: A type of application software designed to summarize, analyze, and visualize data, as well as provide the capacity for sophisticated statistical techniques.

Business Intelligence: Business Intelligence refers to the information and knowledge that is derived from the analysis and interpretation of the data available to an organization.

Data integration: The process of taking data from across program areas and external sources and mapping it onto a unified data structure.

Data mart: A layer of the BI infrastructure providing access to frequently required data. It gives a limited sample of the data in the larger environment, and is usually tailored to the needs of a specific program or functional BI user.

Infrastructure: The infrastructure includes the servers, operating system, databases, and the database management system. It also covers the BI tools that we use to perform business activities, such as reporting, data mining, and analytics.

Metadata: Metadata consists of various pieces of information, also known as attributes, which help an individual to better understand the data they are exploring. These attributes provide context for the data, as well as detail about when and how the data were collected.

2. CORPORATE FOUNDATION

The foundation of BI efforts at the CRA consists of our organizational commitment, our data, our infrastructure, and our people. It has been our experience that a tax administration looking to mature its BI capacity should strengthen each of these interdependent elements.

2.1 Organizational commitment

In the past, BI priorities and investments have tended to be program specific. However, in 2010, CRA published a renewed vision - Vision 2020 - which identified BI as an enterprise-wide strategic priority. Our Corporate Business Plan highlights our BI objectives in many parts of the organization along with the advances we have made to date.

Established strategic investment processes are applied on an ongoing basis to determine where we can most effectively allocate our resources in order to achieve our objectives. For IT-related projects, we also have IT Architecture Roadmaps to ensure that new investments are aligned with our IT transformation plans.

By the end of 2014, we expect to have in place a BI strategy that will lay out the steps that we will take to develop our data, advanced analytics and research capacity.

2.2 Data

The CRA has vast amounts of data in its systems. However, across our many systems, data differ in form, purpose, format, method of storage, and other important attributes.

For BI purposes, it is critical for us to accurately capture the meaning and context of each piece of data found in our databases by using descriptive information (i.e. metadata). Without complete metadata, users risk misinterpretation, which may undermine the value of our BI activities and the decisions that result from them.

As computing technology evolved, the CRA captured metadata in many different repositories, including our current Managed Metadata Environment (MME). When advanced BI technologies were not yet in application, our metadata largely documented the technical specifications of our data, for use by Information Technology (IT) experts. For example, information such as database, table, and schema identifier codes would be specified. This information was of

limited value to business users for BI purposes because it did not provide the context necessary for use without requiring consultation with experts. In some instances, it may not have specified from which tax form and line number a given variable originated. That information is not necessarily important from an IT perspective but can be essential for a business user.

Recently, we held a series of consultations with BI users within the CRA to assess our metadata. That process defined our business needs for metadata, and we realized that the current design of the MME could not accommodate them. Our IT specialists determined that the costs associated with modifying the current MME would be greater than redesigning a new environment. A new environment would also position us to benefit from emerging BI opportunities and techniques. We are therefore proceeding to the options analysis phase, which should be completed by May 2015.

The CRA believes that it is essential to have a governance structure in place for maintaining metadata. The business owners of data, or Data Stewards, should take the lead in managing and maintaining the CRA's metadata. They can ensure that data are managed as a corporate asset, and that the data maintain relevancy and integrity through program and system changes. Traditionally, data were owned by the group that captured or created it, and its quality had been managed to meet the needs of the program for which it was created, without a horizontal view of its usage.

Not having up-to-date, consistent metadata in a central repository can result in functional areas (e.g. Appeals, Compliance, Debt Management, etc.) keeping their own program data dictionaries. Because most business users did not have the authority to change inaccurate definitions that were found in the old metadata environment, they created their own definitions. This challenge brought about by the functional organization of the CRA is one that we are bridging by creating a robust metadata governance structure with clear accountabilities.

The renewal of our MME is an ongoing effort and a high priority project for our organization. We expect to realize a number of benefits once our redesign process has been completed, including most importantly:

- The ability to validate and maintain the currency of CRA metadata;
- A reduction of time and effort spent locating, acquiring, and understanding the data along with a decrease in errors attributed to the lack of understanding of the data;

- An alignment with wider Government of Canada initiatives and standards;
- Consistent business and technical metadata properties across the CRA; and
- A business-friendly interface facilitating accessibility of metadata for all CRA employees.

2.3 Infrastructure

Our ability to perform BI is dependent on the availability of an infrastructure that allows cross-program analysis. It consists of both the platform and the tools that enable advanced statistical analysis, as well as unhindered access to the right data for all authorized business users.

Our traditional BI infrastructure has provided solutions that have enabled CRA program areas to deliver on corporate mandates and to drive program development. It has resulted in an increased return on investment in major program areas, yielding millions of recovered tax dollars and noticeably reducing the time it takes to adjust files and identify target areas for review. Our infrastructure was implemented based on technologies which, at the time, were state of the art. The platform currently supports over 65,000 data elements and over 60 data marts with a CRA user base of over 5,000 users from ten functional client branches.

We are moving forward with a renewal of our BI Infrastructure to build on its original purpose (i.e. performance reporting) and strengthen our ability to do the more advanced analytics that are in demand.

As we renew our BI infrastructure, we are keeping in mind some important goals. For example, the ability to:

- access data more readily;
- process different types of data- external, unstructured, etc.; and
- process larger amounts of data more quickly.

Our BI Tools are another main component of our infrastructure. In the short term, we will be renewing contracts for the existing tools that we currently use, like Cognos, SAS, and IBM Modeller. More advanced tools will allow us to process more data in less time, more intuitively create models and forecasts, and generally use data in a more efficient manner. We are currently articulating the business case and securing funding for these tools. They will push us beyond existing BI capabilities such as data mining and performance measurement/reporting, and into tools that provide for more advanced statistical analysis.

Applied in the tax administration context, these tools help determine which actions to take in the event of unpaid taxes, whom to audit, and which information to push towards taxpayers even before their tax return is filed. As program branches respond to increasing pressures to drive compliance in a changing global economy, there are increasing demands to do work which is exploratory in nature to discover and validate aspects of taxpayer behaviour across the full compliance continuum that were previously not well understood. The nature of this work requires more experimentation in the earlier stages of analysis, and that larger, multiple data sets and formats be integrated across agency program lines.

Supported by the BI platform, BI tools are used by analysts to develop insights from the data and to act on them. For example, they have helped us to improve our strategies to address non-compliance and improve outreach programs, to create risk scoring models that facilitate better targeting of non-compliant taxpayers, and to monitor the effects of these new strategies and risk assessment actions over time.

2.4 Personnel

The people component of our corporate foundation is also important. We have approximately 5,000 registered BI end-users (i.e. those that receive/analyze outputs such as reports and run ad hoc queries) and 250 BI power users (i.e. users of more sophisticated tools to produce analysis and research) from across 10 different client branches within our organization today. These business clients are demanding more capabilities and quicker turnaround times in order to make increasingly horizontal inferences about data relationships.

To take full advantage of the available data, particularly for horizontal research, our people traditionally needed strong computer programming and mathematics skills. They also needed extensive knowledge of the organization's systems and data, in addition to an understanding of the business needs. Now, new technologies are increasing usability and access to advanced BI techniques and methods by a less-specialized set of users. Still, the main challenge is finding and training the right employees, so that we have the capacity to perform BI in an environment where the required skill sets are in demand everywhere. A talent management approach will be a key component of our developing BI Strategy.

One of our responses to this challenge has been to establish a corporate-level Center of Expertise (CoE) in BI staffed with experts who have backgrounds in business, mathematics, and computer

science. Among other offerings, the center will help clients develop statistical approaches for studies and interpret results, and provide the training and promotion of best-practices to empower clients to perform BI analysis on their own. The blended team that staffs our CoE is a relatively recent start-up that is undertaking a number of projects with key stakeholder clients around the organization.

We have also turned our attention across government to explore jointly with other departments and agencies in the Government of Canada the development of BI environments and strategies, and to take a particular look at the human resource aspect. We require a skill set that is in demand both in and outside of the tax administration context. The CRA, as well as other key agencies like Service Canada and Statistics Canada, are well positioned to share best-practices, potential pitfalls, and generally what we have learned, with others. Even though different organizations are in various stages of maturity with regard to their capacity to perform BI, everyone benefits from the consultation and relationship building that occurs.

3. INTEGRATION

The degree to which our data and infrastructure are integrated together has a great influence on our ability to understand and influence taxpayer compliance and monitor risk across time and over multiple business lines. Traditionally, the programs and systems that supported tax administrations and other large organizations were designed and executed in isolation. Now, we require an integrated taxpayer view so that we can manage together all of our service and compliance activities – from web interactions and letters, to enforcement and recourse. By being able to see the behaviour of taxpayers following an interaction with the CRA, we will be able to act more efficiently by focusing on the low-cost interventions at the beginning of the service and compliance continuum (e.g. a phone call reminder), rather than at the end (e.g. an enforcement or legal action). This maximizes compliance, as well as minimizes cost for both the administration and the taxpayer.

However, a host of challenges to horizontal integration exist due to system, data, and user issues. As in other tax administrations, most systems were created independently at various stages of the organization's BI maturity to serve the needs of specific programs and therefore, were not designed with data exchange in mind. As a result, we undertook a feasibility study on integrating data across functions to support a strengthened research and analytics data environment.

We investigated various data integration techniques and appropriate data elements.

Integration techniques were applied to a selection of data items drawn from multiple CRA systems in order to reflect a broad taxpayer view. The study confirmed some of the challenges that would need to be overcome to achieve better integration, and helped us to understand what it would take to get us there.

We found that a casualty of integrating data is the loss of data detail from the source, which could be important for BI. This is particularly true for transactional data, which makes up the majority of CRA data. Different techniques were used to minimize the loss of information. Additional challenges to data integration revolve around the fact that our data is dynamic – it is continually being updated – and systems do not all function with data of the same period, i.e. some are tax - year based, others are case-based and can represent multiple tax years. Additionally, taxpayer privacy and confidentiality must be considered when integrating data. Taxpayers need to be assured their data are being used appropriately and for the purpose for which it was captured.

4. APPLICATION

In this section, we highlight two key examples of recent analytics performed at the CRA. They are indicative of the way that we are applying BI to improve compliance outcomes.

While these are early successes, we recognize the need to continue to advance program applications of analytics based on an assessment of the potential for cost avoidance and/or improved service and compliance outcomes. Our BI Strategy will identify the next priorities for program applications across the Agency.

4.1 Field study and model building approach

One approach to model building at the CRA has been to perform field studies to better understand the compliance behaviours of certain groups and determine variables of interest, and then use those results to inform the development of predictive models. In this section we discuss a model to predict which previously bankrupt filers are most likely to become repeat bankruptcy cases, and another explores the compliance impact of initial outreach meetings on new business registrants.

The Joint Insolvency Follow-up Initiative was a two-part project to address insolvent taxpayers. The first part of the project was a field experiment to test the impact of various outreach approaches on filing behaviour. Phase 2 saw the development of a predictive model to determine, in advance, which insolvent filers are most likely to go bankrupt a second time.

Over 100,000 previously insolvent taxpayers were classified as either second time insolvent or not second time insolvent. These records were combined with data from tax returns, identification tables, and bankruptcy information. A predictive model was then created using modelling software. Approximately 570 variables were used as possible determinants of which taxpayers were most likely to go bankrupt a second time. As a result of the predictive model, each previously insolvent individual was assigned a probability of becoming a second time insolvency case. This allowed us to determine groups of priority cases for follow-up.

The New Registrant Outreach Initiative was a multi-year project which also began with a field experiment designed to test the impact of face-to-face outreach on tax compliance in new business registrants. All new registrants for 23 months were randomly assigned to either the treatment group or a control group. The treatment group was targeted with a roughly two hour outreach meeting, typically scheduled within 3-4 weeks of their registration in order to discuss their responsibilities with regard to personal and corporate income tax, sales tax, payroll, workers' compensation and other aspects for which compliance may become an issue.

This resulted in numerous significantly positive impacts on key compliance behaviours across our business lines for the group that received the meetings. For example, we observed a heightened incidence of tax return filing, as well as a more frequent reporting of taxes owing in comparison with the control group. Among interesting predictors of compliance, we found that in both the treatment and control groups, corporations with married owners were much more likely to report taxes owing, and they responded particularly well to intervention.

One lesson of the field study and model building experience has been that the investment of time and resources in a long-term research project requires a change in culture led by senior management to accept these ventures as part of our overall mix of initiatives. There is a place for scientific studies, but they do not deliver immediate results, so they require a certain tolerance for risk and a return that could take many months, if not years, to materialize.

Though the current methods in use are fairly labour intensive, as we acquire a self-service toolset, along with the ability to get at and process large amounts of data quickly, the development cycles of these models will decrease significantly, making them increasingly feasible and widespread.

4.2 Integrated revenue collections

The Integrated Revenue Collections (IRC) project was initiated to enhance our ability to address debt management challenges. It used technology and BI to modernize our management of debts and filing compliance through a variety of innovations to analyze behaviour, report on debt components, provide data for research and analytics, and enable flexible risk-based workload management in the collection of accounts receivable.

It assists in the identification and application of the most effective strategies in order to improve our debt management programs. It provides:

- Research and analysis;
- Data mining and predictive models;
- Risk management;
- File management; and
- Performance measurement and reporting.

It delivered some immediate operational benefits, but it also provided the building blocks for future additions and modules so that complete redesigns are not required as our sophistication increases. The project is our most advanced application of predictive analysis in operation and we are now applying it to other programs. Our first model took about two years to develop. Now there are six models in production and it is taking about six months to develop each new model.

One of the models, a tax potential data mining model called DM04, improved workload selection and prioritization by predicting the tax potential of outstanding returns. It is used to score the entire taxpayer population of potential non-filer cases for a given tax year, to assess the tax potential for each case, and determine which cases should be pursued through the non-filer enforcement process.

In December 2012, the DM 04 model went into production. More efficient than the legacy system, DM04 was able to identify \$69 million more in assessments than the previous year's baseline, despite assessing 14,953 fewer returns. In addition to this increase in assessed

value, DM04 also caused some taxpayers to file outstanding returns for years other than 2011, realizing \$2.6 million more. The model was also used to score files from our inventory, from regular workload, and from files produced using other compliance strategies (i.e. files outside of the baseline), bringing its additional positive assessments to a total of \$127 million.

Other models under IRC can help us to make determinations such as who will:

- File readily in response to a letter (DM14);
- Eventually pay what they owe (DM07); or
- Go bankrupt before they are able to pay (DM06).

Though the model explained above is just one element of the wider IRC project, it is one that has demonstrated that this sort of modelling, though not without its challenges (such as the need for sustained long-term investment) can help to create actionable intelligence with tangible value to incorporate into our debt management strategies.

5. CONCLUSIONS

Since the CRA first made some early pivotal investments in BI, we have been able to realize some significant achievements. We have progressed from focusing on data collection, to describing that data, to gaining an understanding of taxpayer behaviour, and finally towards predicting and prescribing outreach and responses to address it, improving program outcomes.

We have learned that organizational commitment, both directly from the involvement of senior leaders, and embedded into strategic documents and processes, delivers results.

Our BI strategy will address our need to build a strong foundation of people and technology, improve integration, and support program and service delivery. It will help drive the culture change necessary to move away from traditional risk assessment to advanced BI, and map out the priority investments and projects that are necessary to build the capacity that we need.

Managing data is important and it is no longer just a concern for IT experts. Business owners responsible for managing and maintaining metadata around the organization's data can ensure that data is managed as a corporate asset, even if that data was originally captured

with a specific program purpose. This can help to maintain the integrity of the data's meaning, and prevent a duplication of effort in translating it for business use by different areas of the organization.

Migration to new tools and platforms is a complex process. This is why we are examining our needs through a formal strategic investment process. We are planning and prioritizing our investments in BI infrastructure as a portfolio rather than a series of isolated decisions.

We have also learned that getting cross-functional experts with mathematics, computer science, and business skills together into a CoE is a viable element of a transition strategy as we drive towards a future where specialized skill sets are less and less required to perform and gain insight from BI. Additionally, consulting with other government departments can help to flatten the learning curve in maturing one's own BI capabilities, as the pitfalls and successes of others are often applicable to the tax administration context as well.

Because the domain of business intelligence is always changing, it will continue to open up important opportunities for tax administrations. The CRA looks forward to continuing collaboration with CIAT member organizations and other forums so that we can learn from one another about our experiences in this promising field.

DATA MINING AND OTHER APPLICATIONS IN FINANCIAL AND TAX CRIME INVESTIGATIONS: EXPERIENCE OF ITALY

Giampiero Ianni

Head of International Cooperation Office
Guardia di Finanzas
(Italy)

***Contents:** Introduction. 1. Databases and databanks. 2. Data mining.
3. Conclusions.*

Presentation PPT

INTRODUCTION

Distinguished Authorities and Colleagues

First of all, I wish to congratulate the Receita Federal brasileira on their warm hospitality and the excellent organization which already made of this prestigious event a real success.

Moreover, I would like to thank the CIAT and its Secretary General, Mr. Marcio Verdi for the opportunity I was offered to illustrate the most recent experiences of the Guardia di Finanza with regards to a constant evolving field.

I'd like to move from the considerations addressed by my General Commander to provide you with an overview on what kind of computer tools Guardia di Finanza makes use of in order to evaluate contexts of interest and to identify targets for its investigations and tax audits.

All that, once set forth few preliminary considerations on the general economic scenario and on the tasks the Corps develops even with regard to tax revenue.

There's a common awareness about how the changes that markets have undergone by globalization and new information technologies

have furtherly widened the gap between the economic dimension and the sovereignty of the States.

Tax evaders and fraudsters took good advantage of the opportunities provided by the evolving scenario as well as by the several juridical asymmetries and double non-taxation situations. So, the exploit of loopholes often resulted in aggressive tax planning strategies leading to huge tax avoidance and evasion and to the concealment of their proceed in not cooperative countries.

Therefore, tax investigators and auditors have to carry out their activities implementing a more cohesive approach based on proper intelligence techniques. It's self-evident that a good intelligence could make situations of tax evasion to emerge more proficiently thus allowing more incisive targeting and even more effective audits.

This also results in a necessary prerequisite of a credible action for recovery of tax revenue.

Reporting directly to the Minister of Economy and Finance, the Guardia di Finanza fully avails itself of up to grade investigative tools and procedures in order to tackle tax offenses, both at national and international level.

Its operational efforts aim at striking in their entirety all the phenomena endangering national and European financial interests even countering any form of criminal infiltration of economic and financial markets.

For these purposes, the Guardia puts in place preventive analysis of context, risk assessment and intelligence on the ground carrying out observations, interviews, examinations and audits.

It's worth to mention that many of the relevant data can be collected due to the roadside checks operational units daily carry out.

Even with regard to international cooperation – which represents one of the main tasks of the 2nd Department - the Corps implements tax intelligence by using the administrative information exchange instruments (Conventions and bilateral agreements).

On the other hand, even cooperation with national intelligence agencies is a proficient tool for this kind of purposes. Of significant importance is the support of the network of experts and liaison officers Guardia di Finanza deployed in various EU and non EU Countries and

international organizations in order to facilitate effective and useful cooperation between States.

Finally, of considerable relevance for tax purposes may be the information collected due to judicial police activities upon delegation of the Public Prosecutor or by performing controls required by other Supervising Authorities.

Naturally, the usage of the first ones must be previously authorized by the competent authority.

The wide range of tasks of the Guardia di Finanza reflects the multi-sectorial approach of any of its operational projections even when carrying on tax audits.

In this context, intelligence and analysis processes are increasingly taking on a fundamental role for the investigation on tax offences and on more complex criminal phenomena possibly connected with tax frauds.

The Guardia collects, manages and enriches huge amount of data – both in aggregate and specific fashion - through the utilization of the most recent Information Technology tools, even by creating, developing and feeding on its own data mining specialized apps.

The full availability of several data bases run both by public and private entities represents a fundamental starting point for any of the law enforcement initiatives our investigators put in place.

This means that every information regarding natural and juridical persons is collected, rationalized, linked one with each other and evaluated in order to reach a proper knowledge and awareness of the matter of the audit or of the criminal investigation.

For this purpose a series of initiatives have been undertaken in order to improve the existing procedures for information management and data assets enhancing.

More specifically, a whole set of technological platforms allow getting full access to:

- data bases managed or fed by the Guardia or by other agencies of the national tax administration (internal DBs), by other public entities or by private subjects (external DBs);

- IT applications allowing information exchange, crosschecks and comparison of data from heterogeneous sources in order to implement the available basis of knowledge and to emerge possible connections between different information categories;
- Internet (both in its ordinary running and through the Deep Web) which always remains the prime and basic open source for any intelligence enquires.

1. DATABASES AND DATABANKS

They essentially are digital and structured set of data, i.e. regarding standard descriptions, information on certain topics or disciplines or events, in text or multimedia form which may be accessed through an interface enabling their query and, hence, in conversation mode, their retrieval.

Italian privacy law defines a database as "...any set of personal data, divided in one or more units located in one or more sites".

Both the Special and the territorial units of the Corps may connect to several of these ones for the retrieval of useful information both for analysis and operational purposes.

Among the several ones accessible, we may here cite the following:

1.2. Internal databases

Web-based Tax Register Information System

It is a specific data bank managed by a public company which is fed and accessed by the tax administration. Within the same is contained a great amount of information pertaining to the tax position of individuals and companies registered in Italy.

The application enables to access, inter alia, the following data bases:

- **"SER.P.I.CO." (SERvizio per le Informazioni sul COtribuyente – Taxpayer Information Service)** which allows to get any fiscal data relating to a specific taxpayer, drawing from the relevant details recorded in the Tax Register Information System. These information - referring to personal data, tax returns; tax collections and refunds; personal assets – may be provided by DBs run by external entities.
- **"C.E.T.E." (Economic Control of the Territory)** included in the Tax Register Information System rationalizes data and further elements of possible interest collected during checks on spot, tax

audits, inspections (i.e the ones developed with reference to the money laundering legislation) and police controls on the sea daily carried out.

By matching these ones with all the relevant information, analysts may get awareness of situations in which inconsistency between wealth indexes, expenses, investments and income declared is significant and worth to be deepened.

S.I.VA (Sistema Informativo VALutario - Currency Information System)

Implemented to manage the whole analysis and investigation on suspicious transaction reports (STRs) which the Financial Intelligence Unit (FIU) of the Bank of Italy submits at the Special Currency Police Unit of the Guardia di Finanza.

It's definitely a relevant topic if one takes into account that the connection between money laundering and tax evasion is much closer than it may seem at a first glance. On the other hand, civil investigations on STRs often result in tax audits allowing detecting tax crimes and offences.

“**PiGrecoWEB**” through which the II Department of the GdiF HQs has computerized all the communication flow in order to create and implement a proficient tool for Intelligence and operational analysis.

I'd like to highlight that PiGreco Web contains pretty the whole information assets of the Guardia.

Since 2001, infact, all information and documents dating back 1952 have been digitally recorded and made accessible respectively through a specialized data warehouse app, in a pdf image format. .

The inputs concern all the activities units on the ground carry on with reference to a specific issue allowing connecting context situations, individuals, tax payers and investigations.

1.3. External databases

They are external resources if referred to the Tax Administration and Guardia own information assets.

Those IT apps are generally run by private companies involved in providing their customers with a complete panoplia of services. We may here mention:

- Dun's & Bradstreet run by the homonymous American company, it contains a complete set of information concerning most of the main enterprises in the World.
- The queries are set on two levels: DB ACCESS provides analytical information on each single company; WORLDBASE provides synthetic company information with the possibility to make searches starting from partial data.
- Bloomberg Professional Service allows access to services concerning financial and/or securities intermediation provided by Bloomberg L.P. The service furnishes listings in real time, current and historical information and analyses on the Stock Exchange listed companies.
- Suite Mint information framework, managed by the Bureau Van Dijk ("BvD"), a multinational consultancy company specialized in providing high value-added Information Technology platforms, contains detailed economic and financial data on:
 - joint-stock companies – listed and not listed ;
 - partnerships;
 - banks and insurances at global level.

Specifically, the system is arranged into 5 modules:

1. Companies, containing complete registration details (trade name, address, telephone number, e-mail, web site, activity description, etc.) on corporate ties, shareholding and stakes, mergers and acquisitions (M&A), consultants, financial and budgetary data, profitability indexes, details on import / export activities;
2. Market research, with over 3000 reports, drawn up by Datamonitor (company specialized in business information and market analysis), bearing data on the market, business shares, financial and economic scenarios and forecasting;
3. Directors, concerning firm directors and managers, with details on the mutual contacts and on the present and past offices held also in the capacity of members of the boards of directors;
4. Scanned reports, containing the scans of original documents coming from various sources;
5. News, with articles and news from qualified open sources (Financial Times, Reuters, Moreover, Ansa, MediaAddress) as well as market rumors on mergers and acquisitions (source: database Zephir).

2. DATA MINING

All the elements gathered through:

- access to databases;
- implementation of “deep web” techniques, in order to extract information of interest from the metadata of web queries, going far beyond the findings that web search engines ordinarily allow ;
- operational information;
- investigations – both civil and criminal;
- tax audits, when gaining information on the activities of other relevant subjects;
- International cooperation, necessarily need to be matched and analysed further in order to provide investigators and tax auditors with a more structured and complete set of information.

This implies that only precise and necessary data may be used for full context awareness and in order to start operations on proficiently selected targets. Consequently, all the relationships – both internal and external to their original framework – must be found and then properly defined.

This continuous analysis and follow-up process is technically termed data mining.

More specifically, it could be considered as a set of techniques and methodologies to automatically extract a notion or a knowledge starting from great amounts of data already available.

We’ve already seen how the Guardia di Finanza avails itself of several processing, management and data analysis systems.

By way of example, the two following are computerized data mining systems realized by the Guardia di Finanza on its own: “Geo. Da.S.”(Geo-referencing of Statistical Data) and Molecola.

- **“Geo.Da.S.” (Geo-referencing of Statistical Data)**

Consistent with the strategic aims traced above, the Geo.Da.S. information system for analysis and support to decision making has been realized integrating the Gdf operational records with statistics and detailed data drawn from external sources (Revenue Agency, ISTAT – Central Institute of Statistics, Chambers of Commerce, CONSOB – Securities and Exchange Commission, Ministry of the Interior, etc.).

This way, Geo.Da.S contextualizes all the operational activities in the national economic environment where they'd been carried out supporting strategic analysis and decisions undertaking with relevant alerts and evaluation elements. At the same time, it makes specific criminal or tax evasion phenomena to emerge in their true intensity.

It goes without saying that Geo.Da.S. is not a traditional information system based on the manual input of data on subjects and objects and on their accurate query.

It rather works as an analysis information platform fed by other sources, whose primary goal is to allow queries according to phenomena, thematic areas, aggregations and summary.

Geo.Da.S. enables consultations of the so-called "information universe" on a multidimensional scale, comprising numerous "information planets" properly standardized and integrated one with each other. The outputs may be observed through: various views organized on "horizontal dimensions" (Territorial, Temporal and Sectorial) and "vertical dimensions" (operational, personnel and territorial data).

The strategic decision support purposes are fulfilled through the evaluation summaries reported through a composite system of graphic indicators distributed along the cited "vertical dimensions" which associate context data and investigation and audit findings.

· **"Molecola"**

It's an electronic platform Guardia di Finanza developed on its own for countering structured criminal organizations.

Since its early start up, It has revealed itself as a proficient tool for the individuation of hidden, illegal assets and for carrying out tax audits foreseen by Antimafia Italian legislation with regard to individuals suspected to belong to organized crime.

Molecola's purposes are then the following:

- a. support, through the Information Technology tool, the guidance of the assets investigations through the analysis of complex set of data;
- b. Evidence any index of disproportion between tax returns and effective revenues, as well as identify subjects whose assets require investigative follow-ups.

It enables investigators and auditors to identify subjects which may be profitably tackled from the standpoint of assets seizures. The relevant "work process" includes a first phase in which:

- data of investigative interest are gathered and collected according to a "standardized procedure";
- Those information are loaded in a single "Investigative Data Base", essentially centered on the individual investigated (identifying him/her through his/her own Taxpayer's Code).

Mentioned data may be findings of investigations or of queries to the digital archives available to the Corps.

With specific reference to this phase, Molecola features the possibility to proceed to collect data in a structured manner drawing them massively from other DBs Guardia may access, thus reducing the time required for their further retrieval.

For each of the subjects under investigation, the system creates a computer file containing:

- personal details and relations of kinship (up to the 6th degree) and with other natural and/or juridical persons;
- membership in and/or direct/indirect relations with criminal organizations;
- police and criminal records;
- personal properties, real estate and financial assets;
- tax returns;
- business flows;
- telephone traffic flows.

The consistent analysis of all those data allows, inter alia, to:

- highlight the positions of all those subjects which show significant inconsistencies¹ holding assets in a disproportionate measure if related to their declared income;
- identify direct and/or indirect correlations among persons instantly evaluating and comparing their economic and assets situations;
- perform an interactive analysis of the financial flows as traceable.

The main features of Molecola highlight the most valuable outputs that any analyst, investigator or auditor could take advantage of when dealing with a complex information environment.

¹ following the automatic calculation performed by the application, year by year, through the comparison between "sources and uses"

Specifically, it provides the possibility to:

- obtain the printout with the reorganization of part or all of the information inputted, pertaining to each subject, according to different aggregation models called Reports (economic patrimonial files);
- manage and process considerable masses of data through procedures able to facilitate their reading and comparison;
- interface the data with the operational analysis application Analyst's Notebook, in order to provide a graphic representation of the same and offer an even more intuitive vision of the subjects to be further investigated.

3. CONCLUSIONS

Those are some of the tools the Guardia di Finanza put in place in order to implement an up to grade and proficient intelligence for tax revenue purposes and in the fight against every kind of financial and economic crime.

The evolution of means and approaches is naturally influenced by the changes of the context and advances in methodology and technology.

The experiences gained in this field, an overview of which I tried to give you today, constantly orient our efforts in pursuing more effective ways to combat tax evasion and economic crime in close cooperation with the Tax Authorities of all the countries, being aware those offences are more than ever an international issue and that intelligence and comprehensive knowledge are the first, necessary, step for a credible action.

Hoping my presentation has succeeded in satisfying your curiosity, I remain at your disposal for every question you would like to ask.

Thank you again for your kind attention.

DATA MINING AND OTHER APPLICATIONS IN FINANCIAL AND TAX CRIME INVESTIGATIONS: EXPERIENCE OF INDIA

R.K. Tewari

Chairman of the Central Board of Direct Taxes
Revenue Department
(India)

Contents: Summary. 1. Introduction. 2. Key information sources. 3. Integrated Data Warehouse and Business Intelligence (DW&BI) Platform. 4. Conclusion.

SUMMARY

Indian Income Tax Department (ITD) has embarked on an ambitious computerization plan to improve taxpayer services, promote voluntary compliance and deter tax evasion.

Availability of information in electronic form provided an opportunity to ITD to develop a wide range of non-intrusive methods for improving compliance. This paper presents the experience of ITD in using data mining methods in following areas:

- a. Discovering non-filers with potential tax liabilities
- b. Identifying potential under-reporting taxpayers
- c. Improving compliance of tax deductors
- d. Identification of non compliance in service sector
- e. Identifying implicit linkages for effective investigation

ITD is now implementing a comprehensive Data Warehouse and Business Intelligence (DW & BI) Project to develop an integrated platform for effective utilization of information in all areas of tax administration. The design phase of the project commenced in January 2014 and phased implementation rollout is scheduled in 2015-17. The DW & BI platform will integrate enterprise data warehouse, data mining, web mining, predictive modelling, data exchange, master data management, centralized processing, compliance risk management and case analysis capabilities.

1. INTRODUCTION

Data mining is generally defined as processing and analysing data from multiple sources with the purpose of converting it into actionable information which can be used for specified purpose(s). This paper presents the experience of Indian Income Tax Department (ITD) in using data mining methods.

1.1. Background

ITD has embarked on an ambitious computerization plan to improve taxpayer services, promote voluntary compliance and deter tax evasion. Some important initiatives taken by ITD for improving the quality of tax payer services are:

- Permanent Account Number (PAN) is a ten digit alphanumeric number which uniquely identifies a tax payer. PAN has been issued to more than 200 million persons.
- Online tax accounting system (OLTAS) facilitates near real time reporting, monitoring and reconciliation of tax collection.
- E-payment of taxes has been enabled through Net Banking and ATMs and more than 80% of tax is collected through this mode.
- E-filing of Income Tax Return is mandatory for all the corporate taxpayers, taxpayers requiring statutory audit of accounts, and taxpayers with income greater than INR 500,000. The number of e-filed returns has increased to 29.7 million in F.Y. 2013-14. The percentage of e-filed returns now exceeds 75% of the total returns received in a year.
- In 2009, a Centralized Processing Centre for Income tax returns (CPC ITR) became operational for processing of Income tax Returns in an automated environment to determine tax payable or refund of excess taxes paid on the basis of returned income. All e-filed returns are processed at CPC.
- Refund Banker Scheme enabled the system driven process for determination, generation, issue, dispatch, tracking and credit of tax refunds.
- Under the eTDS scheme the tax deductors submit electronic quarterly statements of tax deductions (withholding of tax). In 2013, a TDS Centralized Processing Cell (TDS CPC) became operational for processing, reconciliation, default resolution to enable end-to-end reconciliation of tax payments and tax credits claimed against withholding of tax.
- The online annual tax credit statement (Form 26AS) is generated for each taxpayer (on the basis of PAN) on the ITD portal which shows the details of tax paid, tax deducted/collected and refund issued.
- ITD has now initiated the Income Tax Business Applications (ITBA) Project to rewrite the old applications and develop new interfaces

and process flows to leverage latest technology and meet the requirements of the new operating environment.

2. KEY INFORMATION SOURCES

Availability of information in electronic form also provided an opportunity to ITD to develop a wide range of non-intrusive methods for promoting voluntary compliance and deterring tax evasion. Approximate number of records in key information sources is as under:

S. No.	Information Type	Numbers per year (approx.)
1	Permanent Account Number (PAN)	28 million allotments (200 million cumulative PAN allotment)
2	Income tax Returns	35 million returns
3	Tax Payment	45 million records
4	Tax Deduction at Source	400 million deductee transaction records in 8 million statements
5	Annual Information Return (AIR)	6 million transaction records
6	Centralised Information branch (CIB)	120 million transaction records

Information sources at serial no. 4 to 6 which are specific to India are explained below.

Tax deduction and collection at source

Tax Deduction at Source (TDS) is one of the modes of collection of taxes, by which a certain percentage of amounts are deducted by a person at the time of making/crediting certain specific nature of payment to the other person and deducted amount is remitted to the Government account. The deductor is also obliged to file quarterly TDS statement giving details of transactions and tax deducted. The concept of TDS envisages the principle of “pay as you earn”. TDS not only ensures regular inflow of cash resources to the Government, it also acts as a powerful instrument to promote voluntary compliance and deter tax evasion. Provisions of TDS are applicable on various payments including:

- Salary
- Interest
- Dividends
- Payment to non-residents
- Payments to contractors
- Commission or brokerage

TOPIC 3.1 (India)

- Rent
- Fees for professional or technical services, royalty etc.

Under the provisions of Tax Collection at Source (TCS), the seller has to collect tax (in addition to the purchase price) from the person who has purchased following items/rights:

- Alcoholic liquor
- Timber
- Scrap
- Parking Lot
- Toll plaza
- Mining and quarrying

Annual Information Return (AIR) Scheme

Under the Annual Information Return (AIR) Scheme, which was introduced in 2003-04, specified entities are required to report the following transactions to ITD:

S. No.	Class of Person	Nature and Value of transaction
1.	Banking Company	Cash deposits aggregating to INR 1,000,000 or more in a year in any savings account of a person
2.	Banking Company or any other Company or institution issuing credit card	Payments made by any person against credit card bills raised aggregating to INR 200,000 or more in the year
3.	Trustee of a Mutual Fund	Receipt from any person of an amount of INR 200,000 or more for acquiring units of mutual fund
4.	Company or institution issuing bonds or debentures	Receipt from any person of an amount of INR 500,000 or more for acquiring bonds or debentures
5.	Company issuing shares through public or rights issue	Receipt from any person of an amount of INR 100,000 or more for acquiring shares
6.	Registrar or Sub Registrar	Purchase or sale by any person of immoveable property valued at INR 3,000,000 or more.
7.	Officer of Reserve Bank of India	Receipt of INR 500,000 or more in a year for RBI bonds

The Annual Information Return is required to be submitted by 31st August following the financial year in which transaction is registered or recorded.

Centralised Information Branch (CIB) scheme

Besides the AIR scheme, ITD also collects need based information about specific financial transactions under the CIB scheme. Some important sources of information covered under this scheme are:

- Sale of immovable property valued at INR 500,000 but less than INR 3,000,000
- Transfer of capital asset at a value lower than value declared for the purpose of stamp duty
- Time deposit exceeding INR 200,000 with a banking company
- Deposit in cash aggregating INR 200,000 with a banking company on a day
- Payment in cash in connection with travel to any foreign country of an amount exceeding INR 100,000 at one time
- Payment to hotels and restaurants exceeding INR 100,000 at one time

Use of data mining methods

ITD has been able to use data mining methods for the following:

- a. Discovering non-filers with potential tax liabilities
- b. Identification of potential under-reporting taxpayers
- c. Improving compliance of tax deductors
- d. Identification of non-compliance in service sector
- e. Identification of implicit linkages for effective investigation

The experience of ITD in the above areas is given in following paragraphs.

a. Discovering non-filers with potential tax liabilities

The Non-filers Monitoring System (NMS) was implemented to prioritise action on non-filers with potential tax liabilities. Salient features of this initiative are:

- Data analysis was conducted to identify PAN holders who had not filed Income tax returns despite conducting high value transaction as reported in AIR, CIB data and TDS/TCS Returns.

- Bulk Data matching exercise was carried out with the Financial Intelligence Unit (FIU) to include non-filers who had conducted high value cash transactions.
- The first NMS Processing Cycle (January 2013) identified 1.22 million non-filers with potential tax liabilities.
- Rule based algorithms were applied to classify the cases as P1, P2, P3, P4 and P5 priority ratings (P1 being the highest priority) for graded monitoring.
- Compliance Management Cell (CMC) was set up for sending letters and capturing responses from the non-filers.
- Bulk letters were sent to PAN holders communicating the information summary and seeking to know the submission details of Income tax return.
- An online monitoring system was implemented to ensure that information related to non-filers is effectively used by the field formation.
- Standard Operating Procedures (SOP) were issued to ensure that the field formations maintain consistency in their approach.

The second NMS Processing Cycle (January 2014) identified additional 2.21 million non-filers with potential tax liabilities. 'Compliance' module was developed on the e-filing portal and information related to non-filers was made available to the specific PAN holder. SMS and email were sent to the target segment asking them to access e-filing portal. The PAN holder is able to provide details electronically and keep a printout of the submitted response for record purposes.

As a result of this initiative, a large number of taxpayers have submitted their Income tax returns and significant amount of self-assessment tax and advance tax has been collected.

b. Identification of potential under-reporting taxpayers

ITD has implemented the computer aided scrutiny selection (CASS) system to select cases for audit using a centralised rules-based system. The salient features of this approach are as under:

- The rules and parameters for selection are reviewed and fine-tuned every year
- Likelihood and quantum of addition made in previous year is computed to suggest modifications in the rules and parameters
- New rules are introduced to cover a broad range of risk scenarios. Third party information is increasingly being used to select cases for audit
- Different financial limits for different geographical areas are used in some rules for equitable distribution of work

-
- The practice of manual discretionary scrutiny selection by the assessing officers was discontinued from 2013
 - Data analysis is conducted to flag 10% of the cases selected under CASS as high priority cases for enhanced follow-up and monitoring

This automated system has brought efficiency and transparency in the process of selection of case for audit.

c. Improving compliance of tax deductors

ITD has used data analytics to improve the compliance of tax deductors in following manner:

- The errors in return and peer group wise data quality analysis are shown to the deductor to improve compliance
- The details of mismatches between tax credit claimed by the taxpayer and tax deduction reported by the tax deductor are analysed to identify high risk deductors for follow up and monitoring

This initiative has resulted in increase of the number of TDS statements filed and the quantum of tax deducted (withheld) at source.

d. Identification of noncompliance in service sector

ITD has conducted a bulk data analysis exercise with the service tax department to identify following categories of persons:

- Persons not registered with service tax department although declaring receipts from services (exceeding the threshold) in income tax return.
- Persons registered with service tax department but not paying service tax although declaring receipts from services (exceeding the threshold) in income tax return
- Persons registered with service tax department but not paying service tax although receiving amount from specified services (exceeding the threshold) in TDS return
- Persons where receipts from services in income tax return is more than 10% of the gross value of service provided in service tax return
- Persons where receipts from services in income tax return is less than 10% of the gross value of service provided in service tax return
- Persons paying service tax but not filing income tax return

While persons in category i) to iv) are being monitored by service tax department, ITD intends to integrate the details of persons in category v) and vi) with the NMS and CASS projects

e. Identification of noncompliance in service sector

ITD has conducted a bulk data analysis exercise with the service tax department to identify following categories of persons:

- Persons not registered with service tax department although declaring receipts from services (exceeding the threshold) in income tax return.
- Persons registered with service tax department but not paying service tax although declaring receipts from services (exceeding the threshold) in income tax return
- Persons registered with service tax department but not paying service tax although receiving amount from specified services (exceeding the threshold) in TDS return
- Persons where receipts from services in income tax return is more than 10% of the gross value of service provided in service tax return
- Persons where receipts from services in income tax return is less than 10% of the gross value of service provided in service tax return
- Persons paying service tax but not filing income tax return

While persons in category i) to iv) are being monitored by service tax department, ITD intends to integrate the details of persons in category v) and vi) with the NMS and CASS projects.

f. Identification of implicit linkages for effective investigation

ITD has implemented the Income Tax Data Management System (ITDMS) which is a two tier distributed system to enable linking of non-PAN data through use of alternate common identifiers. This system is used by the Investigation wing at 20 centres. These linkages have been found to be very useful in identifying family members and other persons related to the individual or entity under investigation.

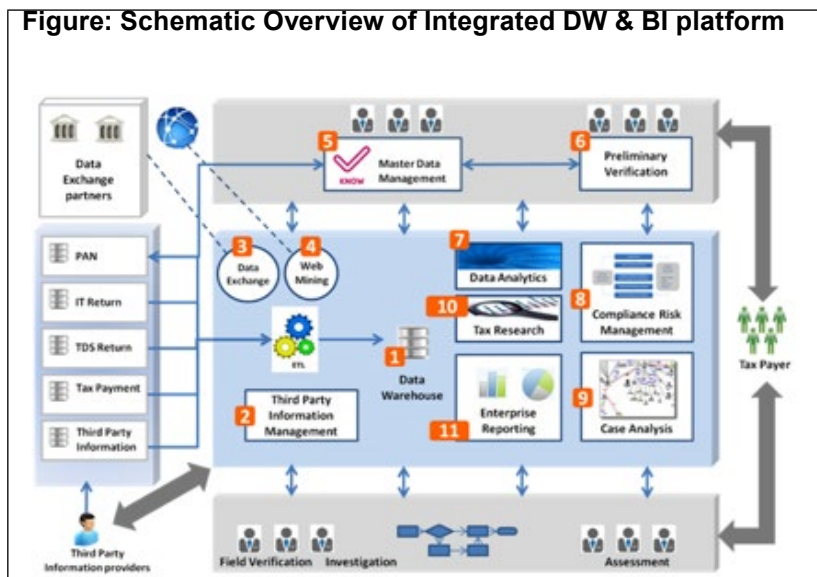
3. INTEGRATED DATA WAREHOUSE AND BUSINESS INTELLIGENCE (DW&BI) PLATFORM

ITD is now implementing a comprehensive Data Warehouse and Business Intelligence (DW&BI) Project to develop an integrated platform for effective utilization of information in all areas of tax administration. The DW&BI platform will integrate enterprise data warehouse, data mining, web mining, predictive modelling, data exchange, master data

management, centralized processing, compliance risk management and case analysis capabilities to achieve the following objectives:

- Widen and deepen tax base
- Improve compliance with tax laws
- Detect fraud and leakage of revenue
- Support Investigation
- Increase effectiveness of tax collection
- Generate enterprise wide reports
- Monitor high risk scenarios
- Provide inputs for policy making
- Tax Research
- Enterprise Reporting

The schematic overview of the proposed DW & BI platform is as under-



The broad functionalities of various modules are as under:

1. Data warehouse: Data warehouse facilitates the collation of data from different sources over the time scale in a manner that is easy for reporting and analysis. The broad functionalities are:
 - Integrate data from multiple source systems, enabling a central view across the enterprise
 - Maintain copy of information from the source transaction systems
 - Improve data quality, by providing consistent codes and descriptions
 - Present the organization's information consistently

- Provide a single common data model regardless of the data's source
 - Restructure the data so that it delivers excellent query performance, even for complex analytic queries, without impacting the operational systems
 - Maintain data history
2. Third party information management: This module ensures effective collection of third party information. The broad functionalities are:
- Enlistment of third party information providers
 - Identification of non compliance by information providers (non submission, late submission, poor data quality etc.)
 - Assessment of coverage of reported transactions and assets
 - Monitoring and follow-up
3. Data exchange: Data exchange enables streamlined and secure exchange of information with data exchange partners The broad functionalities are:
- Enable streamlined process for all types of exchange (request based, spontaneous and automatic) with data exchange partners
 - Develop agreed protocol to ensure inter-operability of data and processes
 - Enable role based Access
4. Web mining: Web mining leverages open source information for improving tax compliance. The broad functionalities are:
- Crawling and mining of open source information to detect new relationships and identify information relevant to the case
 - Detect latest trends
5. Master data management: This module resolves the mismatches and gaps in the master and transactional data. The broad functionalities are:
- Identify duplicates in PAN Master / other Masters such as AIN, TAN etc.
 - Populate PAN in records with missing or invalid PAN
 - Reconcile differences in attributes (address, date of birth etc.) of transactional and master data and create authoritative source of master data
 - Identify and resolve relationships between persons
 - Standardize key fields including name and address
 - Process address field to enable geocoding

-
- Identify records where information in fields (name, address etc.) is insufficient
 - Enable online validation of PAN
6. Preliminary verification: This module captures preliminary response of the taxpayer to a compliance issue in an efficient manner. The broad functionalities are:
- Seek confirmation from taxpayer on resolved identities and information
 - Seek information on whether information relates to taxpayer
 - Seek information about other person to whom the information relates to
 - Promote voluntary compliance
 - Communicate action to be taken by tax payer (e.g. Updation of address in PAN, Quoting of PAN in transactions, submission of return, payment of demand etc.)
 - Communicate list of pending proceedings
7. Data analytics: Data analytics enables identification of useful / actionable information for effective decision making and investigation. The broad functionalities are:
- Assist in identification and management of risk by using data mining, text mining, neural networks, machine learning, fraud analytics, network analytics, event simulation modelling, subject based mining, spatial data mining
 - Use descriptive analytics to gain insight from historical data with reporting, scorecards, clustering etc. anomaly detection, association rule learning, clustering, classification, regression, summarization
 - Use predictive analytics using statistical and machine learning techniques
 - Use prescriptive analytics to recommend decisions using optimization, simulation etc.
8. Compliance risk management: This module enables effective assessment and management of risk. The broad functionalities are:
- Identification and assessment of persons not registering, not filing return, not showing appropriate income or not paying appropriate tax
 - Identification and assessment of all types of non-compliance
 - Detection of fraud and leakage of revenue
 - Detection of potential targets (individual or group)

- Analysis of compliance behavior and selection of appropriate treatment strategy
 - Monitoring of compliance
9. Case analysis: Case analysis prepares and provides case related information and analysis for effective assessment and investigation. The broad functionalities are:
- Conduct automated iterative searches to link all available and accessible information
 - Link persons having explicit or implicit relationships with the subject matter of interest
 - Use predefined templates for conducting link analysis, fund flow analysis, ratio analysis
 - Enable linkage of investigation findings, field enquiry results and additional data to the case
 - Ensure integrity / evidentiary value of digital data
 - Present all related information to the user for taking action and capture feedback
10. Tax research: Tax research module facilitates various types of research. The broad functionalities are:
- Enable research related to economic, structural and revenue aspects of tax policy such as tax buoyancy, revenue stability, revenue foregone analysis, tax gap analysis etc.
 - Facilitate revenue forecasting using regression analysis, predictive modelling, micro simulation models etc.
 - Allow exploration of “what-if” scenarios
11. Enterprise reporting: This module transforms data into meaningful and useful information for decision making, performance management and risk monitoring. The broad functionalities are:
- Enable adhoc as well as standard multi dimensional analytical (MDA) queries for user in CBDT and field formations with “drill-down” and “roll-up”
 - Publish performance indicators and MIS in standard templates and dashboards
 - Generate report on temporal, sectoral and geographic trends
 - Enable monitoring of high risk scenarios

The design phase of the project commenced in January 2014 and phased implementation rollout is scheduled in 2015-17.

4. CONCLUSION

Availability of information in electronic form provided an opportunity to ITD to develop a wide range of non-intrusive methods for improving compliance.

ITD is now developing a comprehensive Data Warehouse and Business Intelligence (DW & BI) platform to integrate enterprise data warehouse, data mining, web mining, predictive modelling, data exchange, master data management, centralised processing, compliance risk management and case analysis capabilities for effective utilization of information in all areas of tax administration.

THE BIOMETRIC REGISTRY CHALLENGES AND OPPORTUNITIES

Erick Ariñez Bazzan
Executive Chairman (a.i)
National Tax Service
(Bolivia)

Contents: Summary. 1. Background. 2. Main features of the National Registry of Taxpayers. 3. The Digital biometric registry (PBD-11). 4. Conclusions.

SUMMARY

Recently, access to new technologies and the determined efforts of the tax administration to improve their functions have generated several substantial changes, both in the registry of taxpayers and in the used systems. However, the most important process of modernization and institutional innovation has started since 2011 with the implementation of the approach “Corporate Process Management” and the corresponding development of primary and support areas systems.

Considering this comprehensive framework, the biometric Digital Registry (PBD-11) is an outstanding technological innovation of the National tax Service, which has allowed capturing the fingerprints, photograph, signature, geo-referencing the home location and supporting the digitalization of documents, increasing security in the registration process, eliminating fraudulent registration and thus facilitating operations for taxpayers.

1. BACKGROUND

For the purposes of tax control, before 1976 Bolivia was using a manual system for the registration and follow-up of taxpayers, however it was inappropriate with respect to the evolution of the economic activity, so that year was created the national Unique Registry of taxpayers (RNUC) through Decree Law No. 13622 of June 3, 1976, based on a common number called Unique Registry of Taxpayer (RUC in Spanish).

During the eighties, important changes took place in the political and economic developments of Bolivia so that, in 1985 emergency policies were implemented through the new economic policy established under the Supreme Decree No. 21060 of August 29, 1985 and the Supreme Decree N° 21137 of November 30, 1985 which determined a series of reforms that entered into force on May 20, 1986 through the law No. 843.

Tax Reform Law

Within this new tax legal framework, new taxes were created such as the value added tax (VAT), the tax on transactions (IT), on specific consumption (ICE) and the Presumed Income of companies (IRPE) that later (in 1994) has been replaced by the tax on the profits of companies (SUI), and it was necessary to adjust the RUC depending on the characteristics of each of the taxes created by the law N ° 843.

Another important moment in the Bolivian tax system and in the national registry of taxpayers took place with the law No. 2492, on August 2, 2003, called the new Bolivian tax code and its normative¹, which creates the tax ID number – TIN, on basis of the provision of a unique tax identification key. In the case of individuals, company owners and undivided successions, the structure of the TIN is the ID card number plus three control codes assigned by the tax administration. For the legal entities, the TIN is composed of several digits followed by control codes generated as algorithms by the system, considering among others the date of the transaction, the type of society and the branch to which it belongs.

The aforementioned legal framework authorizes the SIN to proceed with the registration program through the maintenance and debugging of the new national register of taxpayers associated with the TIN, which application was regulated in September 2003 by the tax administration, with the aim of establishing a new National Register of Taxpayers. The RUC as such remained in effect until December 2004.

One of the main features of the TIN is that it is assigned to the taxpayer on line (at the time of registration) and is centralized in a single database at the national level, i.e., if a company has branches at the national level, the system does not allow a multiple registration, which corrected a flaw of the RUC since this one was granted on an individual basis without being in line with the central registry.

1 Supreme Decree No 27149 of September 2, 2003.

Main normative and technical milestones for the registration of taxpayers

Year	Characteristic	Detail
1976	National Unique registry of Taxpayers (RNUC)	Decree Law No. 13622 3 June 1976, creates the RNUC with a common numbering for the control of the payment of taxes, whether taxes, fees, rights or special contributions that tax any fact or economic activity of Bolivian source.
1987	RNUC	Supreme Decree No. ° 21520 13 of February 1987, approves and regulates the RNUC according to the particularities of the reform of 1985.
	INFORMIX	System that allowed the semiautomatic registration and generated reports or listings, and transcribed data. The allocation of tax obligations was then done manually with the risk of errors and consequently generating unnecessary lawsuits for the tax administration.
1993	Updating data to reorder and improve the registration of taxpayers	Supreme Decree No. ° 23680 19 November 1993, updating data in the General Register of taxpayers with the respective renewal of License and certificate of registration.
1998	Implementation of the integrated system of collection and tax administration (SIRAT-I)	With substantial improvements of the INFORMIX in the registration and control of taxpayers. Database is changed from INFORMIX into ORACLE. Technology aimed at different segments is included. A classifier of economic activities for tax purposes is created and the tax obligations Vector that allows the automatic assignment of tax obligations in function a: economic activity is implemented, according to tax characteristics and nature of the entity, thus reducing the risk of bad allocation of tax obligations.
2002	Implementation of the integrated system of collection and tax administration (SIRAT II)	The version is changed, migrating information, the modules of the SIRAT are expanded, among them the national registry of taxpayers and the corporate database.

TOPIC 3.2 (Bolivia)

Year	Characteristic	Detail
2003	Tax ID - TIN	The new Bolivian tax Code and Supreme Decree No. 27149 (article 25) code creates TIN in substitution of the RUC, empowering the tax administration with the registering of all taxpayers.
2004	Transition from RUC to TIN	Through directory normative resolution No. 10-0032-04, the SIN establishes the requirements and procedures for obtaining the TIN, and mechanisms for the transition from the RUC to the TIN.
2005	Implementation of the TIN	The TIN comes into force in January 2005.
2010	Electronics certification of returns and tax vouchers	Through the resolution rules of directory # 10-0021-10, is set the electronic certification of returns and tax certificates through the Virtual Office which has safety codes.
2011	TIN through the national registry of taxpayers biometric-11 (PBD-11)	The tax administration, by means of resolution rules of directory # 10-0009-11 of 21 April 2011, established procedures and requirements for obtaining and use of NIT, perform data modifications and define mechanisms for maintenance and debugging.
	Certificating the TIN in the electronic PBD-11	Electronic document on registration of the TIN by the tax administration through the Virtual Office to taxpayers registered in the PBD-11. Its validity is limited to the national territory.
	TIN Digital Consultation	By Supreme Decree N° 26716 on June 30, 2002 and administrative rulings N° 05-0003-03 and 05-0016-03, ratified by the PBD-11, authorizes access to the information for public and private sector entities for the verification of the registration in the without using queries through the Digital TIN, as alternative to the use of certified photocopies.

Source: own creation based on regulations

In relation to computer aspects, since 1998 the registry was administered with the system called Integrated System of Collection and Tax Administration (SIRAT), but with the development tools and applications that had been developed the SIRAT had become obsolete and there was a need to provide web-based services to the taxpayers, so during the fiscal year 2005, other technological solutions began to be implemented.

From this change, applications such as GAUSS (new billing system) were implemented which allows: to simplify the process, extend the methods of billing, improve procedures and security in tax notes, incorporate the date limit, the control code and authorization number. The Newton system was also introduced, that allows the filing of the returns by internet and the Copernican system was enabled in the banking system.

Already for the year 2010, within the framework of the institutional modernization process, the SIN established the Virtual Office to facilitate the taxpayer compliance enabling a service on the SIN web site where taxpayers carry out different procedures, tax-related queries, requests for payment facilities, presentation of returns among others, saving on time and costs.

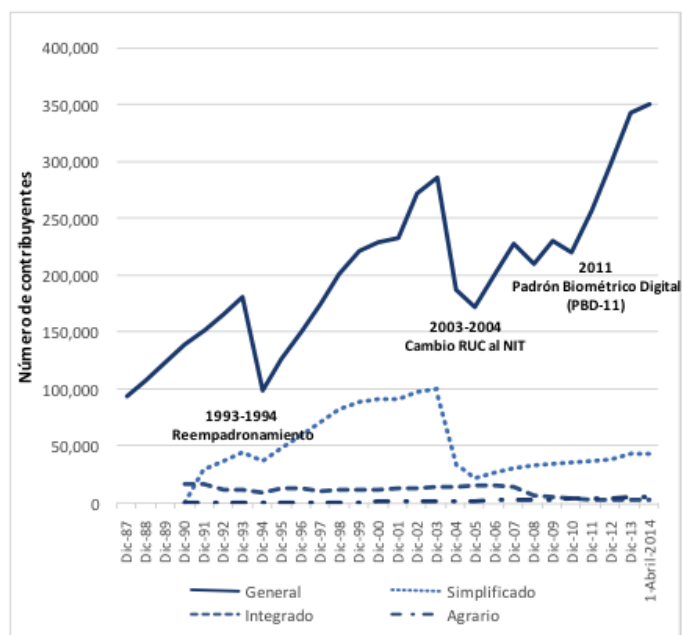
However, the most important process of modernization and institutional innovation is started in 2011, with the implementation of the Business Process Management approach and the corresponding intense development of systems for the primary areas and support areas. Since that year the SIN is an intense process in the development of latest technology and large-capacity systems in order to facilitate the compliance with tax obligations, to improve the controls and also to simplify procedures both for external and internal users.

Among the most outstanding technological innovations is the implementation of the Biometric Digital Registry (PBD-11), in force from May 9, 2011, which has allowed increasing security in the registration process and has facilitated the operations of the taxpayer.

2. MAIN FEATURES OF THE NATIONAL REGISTRY OF TAXPAYERS

Since 1987 the evolution of the national registry of taxpayers has been affected by two important modifications, on the one hand the implementation of new systems during 1993 to 1994, and on the other, between 2003 to 2004 change in the form of registration of all taxpayers, converting the RUC into the TIN (see Figure 1).

Graph 1
Evolution of the National Taxpayers Registry (active) according to regime



Source: SIN

The Registry in Bolivia is divided into regimes and categories, and the General Regime includes three categories: Major Taxpayers (PRICOS), Large Taxpayers (GRACOS) - both determined in consideration of the volume of operations or fiscal significance of collected taxes-, and the REST of the taxpayers. There are also three special regimes (3): Simplified Tax Regime, integrated Tax Regime and the Unified Agricultural Regime.

Table 2 shows the taxpayers with active state enabled by regime.

Table 2
Active taxpayers according to regimes on April 1, 2014

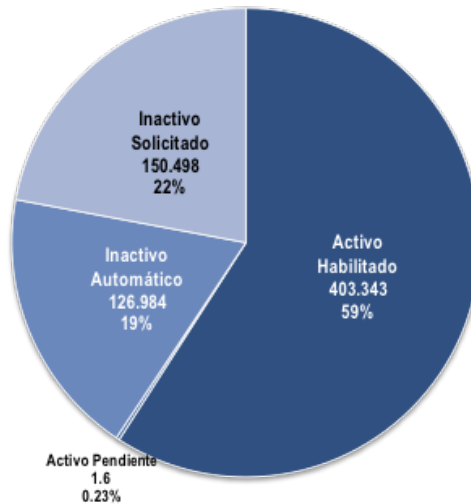
Regime and category	Taxpayers Registry	Participation
General Regime	351.725	87,20%
Main Taxpayers-PRICO	105	0.03%
Large Taxpayers -- GRACO	3,823	0.95%
Others	347,797	86.23%
Special Regimes	51,618	12.80%
Simplified tax regime - RTS	43,716	10.84%
Integrated tax system - STI	2,688	0.67%
Unified agricultural regime - RAU	5,214	1.29%
TOTAL	403,343	100.00%

Source: SIN

For a better management, collection and control of taxes and tax obligations, the tax administration annually carries automatic, massive and special processes for categorizing, classifying or confirming taxpayers in PRICOS, GRACCHI and REST under the General Regime, in accordance with the article 6 of the Supreme Decree # 24603 of 6 May 1997 and the Directory Resolution 10-0006-10 on April 22, 2010.

Using the classification by status of registration, the total of registries, on April 1, 2014, amounts to a total of 682,425 registered, of whom 59.10% are taxpayers who have current activities, 18.61% represent taxpayers who automatically inactivated their TIN due to lack of movement, and 22.05% of taxpayers requested from the tax administration the inactivation of their TIN on a voluntary basis (see chart 2).

Graph 2
Taxpayers registration on April 1, 2014



Source: SIN

3. THE DIGITAL BIOMETRIC REGISTRY (PBD-11)

The biometric registry is the set of automated methods that analyze certain human characteristics to identify or authenticate people, and can identify and recognize someone in a particular application. In the year 2010 a reengineering of the register of taxpayers was implemented with the Directorate Resolution # 10-0009-11 of April 21, 2011², establishing, among others, that the national registry of taxpayers henceforth will be called Biometric Digital National Register of Taxpayers (PBD-11) system that allows to increase the security in the registration process and facilitates the operations of taxpayers.

From May 9, 2011 when the PBD-11 came into force, all individuals, microenterprises, undivided successions and legal entities, these last one with or without separate legal status, national or foreign, domiciled in the country, engaged in taxable activities and resulting taxable for any of the taxes established by law N ° 843 (existing ordered text), as well as all persons who are not passive subjects of them and had to act as retention and/or perception tax agents, are required to register in the PBD-11.

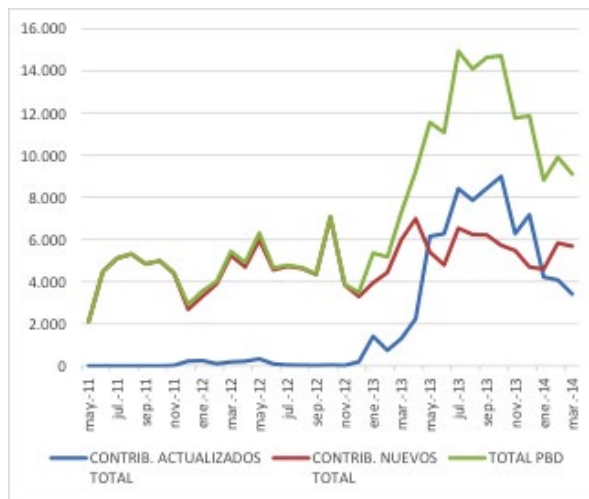
It was also established that taxpayers with active TIN prior to May, 2011 must update their information through the PBD-11, the updating

² It can be downloaded at www.impuestos.gob.bo.

process initially ran for the PRICOS and GRACOS taxpayers between November 10, 2011 and May 31, 2012, and from January 11, 2013 for the rest of taxpayers, whose updating continues during this management term.

Since its implementation, the PBD-11 registry has had a remarkable increase; currently we have 131,715 taxpayers, new or updated, which represent a 33.31% of the total of taxpayers. Regarding the year 2012 their growth has been of 130%; the updates (of the old system) have been the highest demand during 2013. Using a referential indicator, approximately 361 inscriptions per day calendar would have been attended at the national level (see chart 3).

Graph 3
Registrations and updates on PBD-11
In March 2014



Source: SIN

3.1. How PBD-11 work

PBD-11 has four sub-processes: i) inscription, ii) modification, iii) Data updates and iv) other processes.

3.1.1. Sub process of inscription

The new taxpayer who needs to obtain a TIN must proceed to the temporary creation of a username and password and access the Virtual

Office that is available on the web site of the SIN www.impuestos.gob.bo, and fill the interactive registration form.

The form is automatically validated; at the time of registering it generates a form number as well as the instructions for the individual to submit the documentation according to his registration information.

The taxpayer must submit this printed form and the required documentation on the taxpayer site.

The taxpayer platform checks the information and documentation submitted, and proceeds with the following steps:

- a. Fingerprint checking: Digital capture of fingerprints of the taxpayer or the legal representative or proxy.
- b. Digital Photography: of the taxpayer or legal representative or proxy, stored by the tax administration in the Digital database for control and verification purposes.
- c. Digital signature: Capture of the signature of the taxpayer or of the legal representative or proxy, stored at the Digital database.
- d. Geo-referencing of the taxpayer's domicile: the tax domicile declared by the taxpayer is located and registered on a geographical map, identifying the Department, municipality, and address, generating latitude and longitude location data.
- e. Support documents scanning and capture: All original support documents established as requirements presented by the applicant to the taxpayer service platform are processed, scanned and stored in the SIN database.

Once the process of recording and digitalizing the documents is completed, the SIN issues and delivers the TIN, with the following documents:

- a. Certificate of enrollment to PBD-11: Document that includes the TIN and specifies taxes according to economic activities, characteristics and nature of the entity declared.
- b. TIN Exhibit document: A document that is to be displayed permanently by the taxable person in a visible place of tax domicile where the economic activity is carried out.
- c. Virtual Office Access Card: Credential accreditation allowing access of taxpayers to the Virtual Office of the SIN, through the Internet.
- d. Sticker: Authorized sticker given to taxpayers of the transportation sector, must be displayed permanently on the vehicle's windshield.

3.1.2. Modification sub-process

The taxpayer Access the SIN Virtual Office and fill in the interactive TIN modifications form.

The form is validated automatically, when recorded an form order number is generated, if the modified information is sensitive and requires the involvement of the taxpayer for the delivery of documentation, the necessary instructions are sent so that the taxpayer submit the documentation according to the modified information. When the modifications are not sensitive, only a summary of the changes made and recorded in system is generated.

The taxpayer presents this printed form and the required documentation on the taxpayer platform.

The documentation submitted is checked, and the documents are scanned. The address coordinates and location images are generated.

With the complete information, the corresponding documentation is generated and delivered to the taxpayer.

At the end of the day, operations are closed and the processed documentation file is transferred for classification.

3.1.3. Data update sub process

The taxpayer, who already has his TIN with active status enabled or current, must access the Virtual Office that is available on the web site of the SIN www.impuestos.gob.bo with his username and password and fill in the interactive form to proceed with TIN upgrade.

The taxpayer must file the printed form and the required documentation on his jurisdiction's platform, for verification and capture of the information: a) Biometrics of fingerprint b) Digital photograph, c) Digital signature d) geo-referencing of the domicile of the taxpayer and e) Support document capture and digitalization.

Finally, the SIN proceeds to issuing and delivering the TIN: a) certificate of registration for the PBD-11, b) Document voucher of the TIN and c) Sticker for taxpayers who have the transport activity.

3.1.4. Other sub-processes

Other sub-processes are the following: delivery of MASI card, replacement of documents, daily cut-off and tax exemptions.

3.2. Opportunities with the implementation of the PBD-11

The tax administration must facilitate compliance with taxpayers' obligations and ensure that its processes and procedures have a high level of security, and use the current technology, making use of all available resource to provide security in all aspect, for itself and for taxpayers.

Considering this and after three years since the implementation of the PBD-11, it appears that the system provides added security by eliminating identity fraud, facilitates processes, documents are easy to locate, so it reduces costs and use national software.

3.2.5. Security that eliminates the identity fraud

Prior to the implementation of the PBD-11, the TIN was obtained through the physical display of an identity card, with the associated risk of the frequent presentation of a falsified identity card or of another person. This identity fraud to obtain the TIN was used to modify invoices and then simulate a tax credit for a sale without having generated the taxable fact. Now, the registration of the fingerprint and its direct linking to a TIN guarantees that the person who registers his or her fingerprint is directly and unequivocally responsible for the use of the TIN obtained.

The security process comprises the following elements: infrastructure security, security in the process of GI, security in the process of moving, safe processing, and safety in the storage and access, integrity, confidentiality and availability of data.

We are currently working on links with the database of the General Service of Personal identification, which will complete the circuit of verification of identity.

3.2.6. The procedures for the taxpayer and the tax administration are more convenient

Registration and modification procedures are performed using the Internet, which gives the taxpayer the possibility of filling forms with better advice and comfort. This, in turn, allows a faster attention on platforms, optimizing the time of attendance with pre-filling of forms,

which reduces registration errors. This has allowed to delegate to the taxpayer many actions previously performed by the tax administration.

For any modification, the operations of the taxpayer are made easier since it avoids submitting photocopies or other authentication documents, providing security in all its operations.

3.2.7. Documents easy to retrieve

Storing the digital information of the taxpayer (for example, initial balance, proof of constitution, powers of representation and delegations others.), allows not having to submit again the documentation for any operation. They are easy to retrieve, so we have more documents and better information on the taxpayer.

3.2.8. Cost reduction for the TA and the taxpayer

The biometric registry to the optimization of processes using BPM and the increasingly frequent use of communication by Internet and web services, have allowed the reduction of costs for the SIN (printing of forms, storage, distribution, transcription of information), but also lower costs to the taxpayer in time and transportation, and for society that is benefited with the reduction of paper and other pollutants that affect the environment.

3.3. Use of software made in Bolivia

The PBD-11 operates with software developed by Bolivian professionals of the tax administration itself, which is an advantage because it allows rapid and timely changes in the system, due to changes in tax legislation and other needs. Therefore, the PBD-11 reduces costs associated with licenses or upgrades that would have incurred if external software was used.

3.4. Challenges for the PBD-11 implementation

Due to the disparity between areas regarding access to internet, there are municipalities where the digital registry is difficult to implement, as well as submitting the tax returns through the Virtual Office. Presently this problem is resolved by the intervention of the tax collectors, to register later at the nearest office with access to Internet services. However, it is expected that with improvements in communications, in the near future this limitation will no longer exist.

On the other hand, even if the tax administration has implemented the virtual services, and increased its platforms spaces and attending personal, this is still insufficient. The registration time, the high concentration in the cities and little practice in the type of virtual services by certain sectors of the population, especially the small taxpayer, are still existing problems. Although measures are being sought to resolve these problems, extending the platforms and ensuring that the different stages of invoicing are performed through the Virtual Office will be an important step forward.

The geo-referencing is an aspect which is fifty per cent operational, since there are no updated mappings, so its adjustment and continuity are being evaluated.

To improve the validation of the registry, routines are implemented to feed continuously the information of tax significance generated by other public agencies, as well as to generate a policy where the TIN is a number of liaison between public agencies, and working on the implementation of the single window for all procedures, where the TIN could be the common registration number.

4. CONCLUSIONS

In twenty-seven years of existence the RUC and the TIN, the TA performed the registration initially by means of manual records and semi-automatic procedures, and later the new technologies and a decided effort to identify and properly register the taxpayer, led to introducing the SIRAT I and II, systems that have allowed improving the registration and control of taxpayers.

However, after the implementation of the PBD-11 three years ago, another transcendental improvement has taken place because it allows providing greater security and reliability in the registration process, eliminating the fraudulent registration. It helps the taxpayer to carry out processes from the comfort of their home or office through the Virtual Office. Reducing costs and processing time, it also reduces the use of paper and physical storage spaces, which has meant a significant saving of resources to the institution.

Although the PBD-11 has not a national scope yet due to technological limitations in some areas of the country, it keeps improving to provide more reliability to the registry by updating those registered under the previous system, as well as reducing the taxpayer's time, a task that will always be part of management, and the final goal will be the process of linking all the systems, not only for the well-being of taxpayers but for the one of the tax administration.

IDENTITY THEFT: CHALLENGES AND OPPORTUNITIES

Douglas O'Donnell

Assistant Deputy (International) Commissioner
Internal Revenue Service
(USA)

Contents: 1. Identity theft. 2. Competing goals at the Internal Revenue Service. 3. Addressing identity theft. 4. Conclusion.

1. IDENTITY THEFT

Summary: Although the problem of identity theft is not new, the increasing use of the internet to perform day to day activities has increased the opportunities to both steal and use identification information. While the internet makes it possible to quickly file a legitimate tax return and have a tax refund deposited in a bank account, it also makes it possible to quickly file a fraudulent tax return and receive a tax refund. The Internal Revenue Service (IRS) recognizes that identity theft is an important concern to all taxpayers, and its employees are addressing the problem on many fronts. As a result of its aggressive efforts to combat identity theft, the IRS stopped 14.6 million suspicious returns and protected over \$50 billion in fraudulent refunds from 2011 through November 2013.

The IRS has over 3,000 employees focused solely on identity theft issues. The IRS investigates identity theft cases and prosecutes identity thieves. The IRS works to prevent refund fraud by educating taxpayers to take actions that minimize third-party access to social security numbers, by expanding the number of identity theft filters used to recognize patterns in fraudulent returns, by increasing monitors and controls over direct deposits of refunds to bank accounts or debit cards, and by trying to match third-party information reporting and tax return reporting at an earlier stage of tax return processing. The IRS investigates identity theft-related crimes and uses centralized data bases, from both within the IRS and with other governmental agencies. It helps taxpayers who have been victimized by identity thieves by sharing taxpayer information with other law enforcement

agencies to expand the network tracking the thieves and by providing a special identity number to taxpayers who have been the victim of identity theft so the IRS recognizes their return as legitimate. The IRS continues to dedicate more and more employees to the resolution of cases involving victims of identity theft. The IRS has developed, and continues to develop, methods to identify fraudulent returns and refunds earlier, so that it can prevent the returns and refunds from being processed.

Many groups, both within the IRS and from other government agencies, address the problem of identity theft. Oversight groups review IRS actions and recommend additional or different steps that the IRS can take to improve its ability to detect identity theft and prevent refund fraud.

1.1. A brief history of identity theft

Identity theft is not a new phenomenon. If you search for “Identity Theft” on the internet, one hit states that the first case of identity theft occurred in the book of Genesis in the Bible, when Jacob covered himself in skins to fool his father into thinking that Jacob was his brother Esau. As a result of this identity theft, Jacob obtained his father’s blessing and all the sheep and lands that really belonged to Esau.¹

Identity theft has diverse purposes. When the drinking age is 21, many young people acquire identification cards that indicate they are someone else or at least older than they really are. People have false or alternate identification for voter fraud and other types of identity fraud.²

The age of the internet has expanded both the ability to steal someone’s identity and the ability to use that stolen identity. Hackers access seemingly secure sites and take social security and credit card information, which they then use to purchase items or, in more complex situations, apply for more credit cards. This leaves the actual owner of the identity liable for unknown financial charges and facing what may be months or years of effort to undo the effect of the theft.³

¹ <http://idtheft.about.com/od/identitytheft101/a/A-Brief-History-Of-Identity-Theft.htm>, referring to Genesis, chapter 27

² Id.

³ *Treasury Inspector General for Tax Administration (TIGTA), Ref. No. 2005-40-106, A Corporate Strategy Is Key to Addressing the Growing Challenge of Identity Theft (July 2005), p. 1*

There was no federal law making identity theft a crime until 1998.⁴ At that time, the Federal Trade Commission (FTC) was tasked with establishing procedures to keep track of instances of identity theft, inform people about identity theft, and take appropriate actions about identity theft.⁵ Accounting for more than 43 percent of the FTC's identity theft complaints in 2012, tax identity theft was the largest category of identity theft complaints by a substantial margin. In addition, the percentage of tax identification theft complaints nearly doubled, from just over 24 percent in 2011.⁶ The FTC has reported identity theft as the number one consumer complaint since calendar year 2000.⁷ Clearly this is a problem that is not going away.

1.2. Types of identity theft

Identity theft occurs when someone wrongfully obtains and uses another person's personal data in a way that involves fraud or deception, typically for economic gain.⁸ There are many types of identity theft. Financial identity theft includes both the theft of credit card information and the theft of a social security number (SSN). Criminal identity theft occurs when someone wants to be a different person, for whatever reason. Driver's license identity theft occurs to provide drivers' licenses for individuals not otherwise able to get a license, whether the reason is because the person simply needs to be able to drive or because the person wishes to enter or remain illegally in the United States. Medical identity theft involves the theft of identification to obtain medical care or services.⁹

When an identity thief steals a credit card or credit card number, the thief takes over the identity of the victim and obtains new credits cards or uses stolen credit cards to buy goods and services. This type of identity theft has been prominent recently with reports about the massive identity thefts that occurred at Target stores in November and December 2013,¹⁰ as well as at Neiman Marcus.¹¹ In some cases, the victim does not learn of credit card theft until substantial damage is

⁴ See PL 105-318, *The Identity Theft and Assumption Deterrence Act of 1998*

⁵ *Id.*, sec. 5

⁶ <http://www.ftc.gov/news-events/press-releases/2014/01/ftcs-tax-identity-theft-awareness-week-offers-consumers-advice>

⁷ TIGTA, Ref. No. 2013-40-122, *Detection Has Improved; However, Identity Theft Continues to Result in Billions of Dollars in Potentially Fraudulent Tax Refunds* (September 20, 2013), p. 1

⁸ <http://www.justice.gov/criminal/fraud/websites/idtheft.html>

⁹ <http://www.consumer.ftc.gov/features/feature-0014-identity-theft>

¹⁰ http://www.nytimes.com/2013/12/20/technology/target-stolen-shopper-data.html?page-wanted=all&_r=0

¹¹ <http://www.nytimes.com/2014/01/24/business/neiman-marcus-breach-affected-1-1-million-cards.html>

done – the credit card companies go after the victim for payment of the charges under the credit card and their credit scores decline. Credit card companies are trying to address this problem in many ways, including through the use of a chip imbedded in the credit card.¹²

The theft of an SSN is the second type of financial identity theft. There are two primary types of SSN identity theft that relate to tax administration. One type involves using another person's identity (name, SSN, or both) to obtain employment. The second type involves using another person's identity (name and/or SSN) to file a fraudulent tax return to unlawfully obtain a tax refund.¹³

Identity theft for employment purposes generally involves the theft of a single identity. The thief could be an individual who is in the United States (legally or illegally) without authorization to work, but who wants to work, or he or she could be someone who is trying to escape a real financial past – perhaps the individual has prior debts or child support payments and wants to remain hidden in the United States. In either case, the individual steals an SSN number¹⁴ and presents him or herself to an employer as an individual able to work in the United States with this specific SSN. The employer relies on this valid SSN – although not valid for this individual – and hires the individual, withholding and remitting taxes to the federal government on the income paid to the individual. The employer reports the income and taxes on a W-2. While the identity thief often does not file a tax return, the individual who is the lawful owner of the SSN does file a tax return to report wages, other income, and withheld taxes. The individual has no knowledge of the income earned by the identity thief, so he does not include these wages in income. In its matching process, the IRS associates two W-2's with one SSN and contacts the legal owner of the SSN to increase reported income and request additional taxes.¹⁵ Then the individual has the difficult challenge of providing a negative – he or she did not perform the work and receive the wages, even though the W-2 issued by the employer indicates that the work was performed. The Treasury Inspector General for Tax Administration (TIGTA) reviewed the IRS' actions in assisting victims of identity theft in 2008. It determined that, while the IRS had made progress in addressing employment-related identity theft, substantial work was

12 <http://www.usatoday.com/story/news/nation/2014/01/09/encrypted-chips-help-fight-credit-card-fraud/4400347/>

13 TIGTA, Ref. No. 2005-40-106, pp. 5 - 6

14 It is not even necessary to steal an SSN. Some people buy real or counterfeit SSNs. See <http://oig.ssa.gov/what-abuse-fraud-and-waste/buying-or-selling-counterfeit-or-legitimate-social-security-cards>.

15 TIGTA, Ref. No. 2005-40-106, p. 6

still needed. Most IRS efforts at that time were related to outreach and not to the prosecution of identity theft cases.¹⁶

Perhaps the more costly type of identity theft to the IRS is identity theft that results in refund fraud. In this type of identity theft, the thief steals a number of SSNs and files fraudulent tax returns to claim refunds. Even if the IRS detects this fraud during its review process, it faces the lengthy and costly task of pursuing the thief to recoup any refunds made.

The methods of stealing a person's identity (usually the SSN and/or name) are numerous and often occur in connection with the identity thief's regular employment. Recent cases about identity theft include the following:

1. 2 corrections officers in Alabama with access to the personal identifying information of every inmate in the custody of the Alabama Department of Corrections, past and present, used information stolen from the databases to file false federal income tax returns in the names and SSNs of inmates. They directed stolen tax refunds onto prepaid debit cards and requested other refunds in the form of U.S. Treasury Checks.¹⁷
2. In three different cases, workers at nursing homes used their positions to obtain personal identifying information from thousands of patients. With the help of others, that information was used to submit fraudulent federal tax returns and receive tax refunds in the patients' names.¹⁸
3. A clerk of court had access to the Florida Department of Highway Safety and Motor Vehicle Driver and Vehicle Information Database. The clerk copied personal identity information and provided the information to a co-conspirator in exchange for a cash payment. The information was used to file fraudulent tax returns seeking refunds.¹⁹
4. A part-time IRS data entry clerk stole tax returns from the IRS Service Center where she worked and filed fraudulent tax returns using information from the stolen tax returns to claim excessive federal tax withholdings.²⁰
5. An IRS tax examining technician was recently indicted (formally accused but not yet tried) for identity theft. The employee had

¹⁶ TIGTA, Ref. No. 2008-40-086, *Outreach Has Improved, but More Action Is Needed to Effectively Address Employment-Related and Tax Fraud Identity Theft* (March 25, 2008), p. 2

¹⁷ <http://www.justice.gov/opa/pr/2014/January/14-tax-084.html>.

¹⁸ <http://www.fbi.gov/atlanta/press-releases/2014/yolando-blount-sentenced-to-27-years-in-nursing-home-identity-theft-scheme>; <http://www.justice.gov/opa/pr/2014/January/14-tax-048.html>; <http://www.justice.gov/usao/vae/news/2014/01/20140124ighalonr.html>.

¹⁹ <http://www.justice.gov/usao/fls/PressReleases/140117-03.html>.

²⁰ http://www.justice.gov/usao/cae/news/docs/2014/2014_01/01-21-14Hernandez.html.

access to taxpayer personal identifying information as part of her job and shared it with co-conspirators to file fraudulent tax returns requesting refunds. She then used her access to IRS computers to review these fraudulent returns and authorize the release of the refunds.²¹

6. Two individuals in Alabama filed over 500 fraudulent tax returns seeking at least \$3.7 million in tax refunds. The individuals fraudulently obtained the names and SSNs of Medicaid beneficiaries through the employment by one of the individuals at a company that services Medicaid programs.²²

No one is immune from being a victim of identity theft. An individual was recently found guilty of the theft of the identities of more than ten individuals, including the United States Attorney General.²³

1.3. Factors contributing to the growth in identity theft

The Internet

When everyone kept their identification information in their wallet or desk and shared it only by showing it to someone, identity theft could occur only if an individual physically showed the information to a third party or if the identification card was lost or stolen. The increasing popularity of the Internet is making the personal exchanges of information almost nonexistent. Instead, people buy goods and services online and pay for them with credit card information provided online. They may even provide substantial personal identification information – birthday, SSN, etc. – online in connection with a purchase or other activity. Even moderately skillful hackers can access this information and use it for illegal purposes. The “personal” filter of face to face interaction no longer works to detect fraud.

2. COMPETING GOALS AT THE INTERNAL REVENUE SERVICE

a. Electronic return filing

Title II of the Internal Revenue Service Restructuring and Reform Act of 1998 provided that it was Congress’s policy that the electronic filing of federal tax and information returns was the preferred means of filing returns and that it was the goal to have 80 percent of all returns filed

²¹ http://www.treasury.gov/tigta/oi_highlights.shtml.

²² <http://www.justice.gov/opa/pr/2011/October/11-tax-1366.html>

²³ <http://www.fbi.gov/atlatlanta/press-releases/2014/identity-thief-sentenced-for-filing-tax-returns-in-the-names-of-the-attorney-general-and-others>

electronically by 2007.²⁴ Thus, the IRS had the mission of facilitating tax return filing through the internet.

b. Quick refunds

The taxpayer always wants her tax refund as soon as possible. Certain credits, such as the Earned Income Tax Credit, are made available only as a refund after a tax return is filed. Returns are filed electronically and taxpayers want a refund immediately. Refunds made by direct deposit into a checking or savings account are available to the taxpayer more quickly than refunds made than with a paper check.²⁵ As a result, returns are received and refunds are processed well before the return is screened for accuracy (other than for the standard math and other simple errors). In addition, while a human reviewing return might have noticed without prompting a pattern of multiple refunds being mailed to the same address, computers must be programmed to identify specific issues.

c. Lack of centralization

Many groups at the IRS are involved in one or more aspects of the identity theft process. The National Taxpayer Advocate has identified almost 20 different units at the IRS that could be involved in resolving an identity theft issue and has criticized the IRS for not having one central contact per victim.²⁶ This contact would make sure that all groups that need to be involved are involved, without having each group treat the same identity theft event as a new issue. It may take 20 months – or even longer – before issues relating to identity theft are resolved.²⁷ TIGTA identified as an issue in the investigation of a large refund fraud scheme the fact that confiscated mail was being worked by multiple functions within the IRS. This makes it difficult to track issues such as multiple deposits to the same account or to identify large patterns of behavior.²⁸

24 Pub. L. 105-206, sec. 2001. This goal was achieved for filing year 2012. <http://www.irs.gov/uac/2012-Filing-Season-Statistics>.

25 2013 Instructions for Form 1040, Individual Income Tax Return, p. 69.

26 <http://www.taxpayeradvocate.irs.gov/userfiles/file/2013FullReport/IDENTITY-THEFT-The-IRS-Should-Adopt-a-New-Approach-to-Identity-Theft-Victim-Assistance-that-Minimizes-Burden-and-Anxiety-for-Such-Taxpayers.pdf>.

27 TIGTA, Ref. No. 2012-40-050, *Most Taxpayers Whose Identities Have Been Stolen to Commit Refund Fraud Do Not Received Quality Customer Service* (May 3, 2012), p. 8.

28 TIGTA, Ref. No. 2012-42-080, *There Are Billions of Dollars in Undetected Tax Refund Fraud Resulting From Identity Theft* (July 19, 2012), p. 17.

3. ADDRESSING IDENTITY THEFT

a. Oversight and recommendations

The National Taxpayer Advocate has identified issues relating to identity theft as one of the Most Serious Problems in the Annual Report submitted to Congress in nearly every year since 2003.²⁹ The Government Accountability Office (GAO) first considered identity theft (referred to as “identity fraud”) in a report issued in 1998.³⁰ Four years later it reported that all measures available indicated that the prevalence of identity theft was growing.³¹ In 2009 GAO assessed the IRS’s efforts to address the impact of identity theft on taxpayers, including efforts to prevent and detect identity theft-related tax problems³² and has continued to review IRS initiatives and actions in recent years.³³ TIGTA first considered identity theft in a report issued in 2005³⁴ and has revisited specific issues relating to identity theft in many reports issued since 2005. It has recommended actions to help minimize the incidence of identity theft or resolve issues relating to individual identity theft more quickly.³⁵

29 See, e.g., http://www.irs.gov/pub/irs-utl/nta_2003_annual_update_mcw_1-15-042.pdf (discussing identity theft where undocumented workers uses stolen SSNs to obtain employment); <http://www.irs.gov/pub/tas/ntafy2004annualreport.pdf> (identity theft treated differently at different IRS campuses); http://www.irs.gov/pub/irs-utl/section_1.pdf (2005 Most Serious Problem #9 is Identity Theft); http://www.irs.gov/pub/tas/arc_2007_vol_1_cover_msp.pdf (2007 Most Serious Problem #6 is Identity Theft Procedures); http://www.irs.gov/pub/tas/irs_tas_arc_2011_vol_1.pdf (2011 Most Serious Problem #3 is Tax-Related Identity Theft Continues to Impose Significant Burdens on Taxpayers and the IRS); <http://www.taxpayeradvocate.irs.gov/userfiles/file/2013FullReport/IDENTITY-THEFT-The-IRS-Should-Adopt-a-New-Approach-to-Identity-Theft-Victim-Assistance-that-Minimizes-Burden-and-Anxiety-for-Such-Taxpayers.pdf> (2013 Most Serious Problem #6)

30 GAO/GGD-98-100BR, *Identity Fraud: Information on Prevalence, Cost, and Internet Impact is Limited* (May 1998)

31 GAO-02-363, *Identity Theft: Prevalence and Cost Appear to be Growing* (March 2002)

32 GAO-09-882, *Tax Administration: IRS Has Implemented Initiatives to Prevent, Detect, and Resolve Identity Theft-Related Problems, but Needs to Assess Their Effectiveness* (September 2009)

33 GAO-13-515, *Tax Refunds: IRS is Exploring Verification Improvements, but Needs to Better Manage Risks* (June 2013). Officials at GAO also have testified before Congress on issues related to identity theft. See GAO-11-721T, *Taxes and Identity Theft: Status of IRS Initiatives to Help Victimized Taxpayers*, Testimony of James R. White Director Strategic Issues, before the Subcommittee on Government Organization, Efficiency and Financial Management, Committee on Oversight and Government Reform, House of Representatives (June 2, 2011) and GAO-12-132T, *Identity Theft: Total Extent of Refund Fraud Using Stolen Identities is Unknown*, Testimony of James R. White Director Strategic Issues, before the Subcommittee on Government Organization, Efficiency and Financial Management, Committee on Oversight and Government Reform, House of Representatives (September 29, 2012)

34 TIGTA, Ref. No. 2005-40-106

35 See, e.g., TIGTA, Ref. No. 2008-040-086; TIGTA Ref. No. 2012-40-050; TIGTA Ref. No. 2012-42-080; TIGTA Ref. No. 2013-40-062, *The Tax Protection Program Improves Identity*

In 2005, TIGTA made five recommendations to the IRS to help address their determination that the IRS had no corporate strategy to address identity theft issues or centralized data on identity theft: (1) ensure agency-wide communication tools are updated to include information about identity theft, (2) ensure information provided by the IRS to taxpayers or for use by other Federal Government agencies when referring individuals to the IRS is complete and accurate, (3) develop agency-wide standards to ensure consistency when requiring taxpayers to substantiate claims and when allowing taxpayers future exemptions and credits, (4) develop specific closing codes for cases involving identity theft, and (5) develop an Enterprise Identity Theft Strategy that includes processes to proactively identify instances of identity theft and to resolve identification number discrepancies, while protecting tax revenue and enforcing the law.³⁶ In October 2005, the IRS established the Identity Theft Program to develop centralized policy and procedural guidance.³⁷ TIGTA acknowledged in its 2008 report that the IRS had made progress in the implementation of these recommendations, but it identified other areas for improvement. TIGTA has continued to review identity theft in audit reports and has testified before Congress.³⁸

b. Increased participation of criminal investigation

As of 2013, identity theft-related crimes are a priority area of investigation for the Criminal Investigation Division (CI) within the IRS.³⁹ In its 2013 Annual Report, CI indicated that it participates in over 70 task forces/working groups throughout the country that investigate both financial crimes as well as identity theft crimes.⁴⁰

Theft Detection; However, Case Processing Controls Need to be Improved (June 21, 2013); TIGTA 2013-40-122

36 TIGTA Ref. No. 2005-40-106, pp. 12 – 20.

37 TIGTA Ref. No. 2008-40-086, p. 3

38 See, e.g., *Testimony of The Honorable J. Russell George, Treasury Inspector General for Tax Administration, Identity Theft and Tax Fraud, before the Committee on Oversight and Government Reform, Subcommittee on Government Organization, Efficiency and Financial Management (November 4, 2011); Testimony of The Honorable J. Russell George, Treasury Inspector General for Tax Administration, Identity Theft and Tax Fraud: Growing Problems for the Internal Revenue Service, Part IV, before the Committee on Oversight and Government Reform, Subcommittee on Government Organization, Efficiency and Financial Management (November 29, 2012); Testimony of Michael E. McKenney, Acting Deputy Inspector General for Audit, Treasury Inspector General for Tax Administration, Refund-Related Identity Theft, before the Committee on Oversight and Government Reform, Subcommittee on Government Operations (August 2, 2013)*

39 <http://www.irs.gov/pub/foia/ig/ci/REPORT-fy2013-ci-annual-report-02-14-2014.pdf>, p. 7

40 <http://www.irs.gov/pub/foia/ig/ci/REPORT-fy2013-ci-annual-report-02-14-2014.pdf>, p. 7. As recently as 2008, TIGTA noted that IRS policy was that the actual crime of identity theft would only be investigated by CI if it was committed in conjunction with other criminal offenses having a large tax effect. TIGTA, Ref. No. 2008-40-086, p. 5

The investigative work done by CI is a major component of the IRS's efforts to combat tax-related identity theft. The IRS has seen a significant increase in refund fraud that involves identity thieves who file false claims for refunds by stealing and using someone's SSN. In the most recent fiscal year (October 1, 2012 through September 30, 2013), the IRS initiated approximately 1,492 identity theft related criminal investigations, an increase of 66 percent over investigations initiated in FY 2012.⁴¹ Only 276 identity theft related criminal investigations were initiated in FY 2011. Direct investigative time applied to identity theft related investigations has increased 216 percent over the last two years. Prosecution recommendations, indictments, and those convicted and sentenced for identity theft violations have increased dramatically since FY 2011. Sentences handed down for convictions relating to identity theft have been significant, ranging from two months to 317 months.

CI has many tools and methods to stop identity theft. Some of them include the following.⁴²

1. Identity Theft Enforcement Sweeps - In January 2013, CI conducted a coordinated identity theft enforcement sweep in collaboration with the Department of Justice-Tax and United States Attorney's Offices throughout the country.⁴³ This nationwide effort resulted in 734 enforcement actions related to identity theft and refund fraud and involved 389 individuals, 109 arrests, 48 search warrants, and 189 indictments, information and criminal complaints. This continued the coordinated enforcement efforts begun earlier.⁴⁴
2. Law Enforcement Assistance Program - In March 2013, IRS announced that the Law Enforcement Assistance Program, formerly known as the Identity Theft Pilot Disclosure Program, was expanded nationwide.⁴⁵ This program provides for the disclosure of federal tax return information associated with the accounts of known and suspected identity victims of identity theft. With the express written consent of the victim of identity theft, the IRS releases the fraudulent tax return information filed by the identity thief to the law enforcement agency. There are currently more

⁴¹ <http://www.irs.gov/pub/foia/ig/ci/REPORT-fy2013-ci-annual-report-02-14-2014.pdf>, p. 10

⁴² <http://www.irs.gov/uac/Newsroom/IRS-Criminal-Investigation-Combats-Identity-Theft-Refund-Fraud>.

⁴³ <http://www.irs.gov/uac/Newsroom/IRS-Intensifies-National-Crackdown-on-Identity-Theft-January-2013>.

⁴⁴ <http://www.irs.gov/uac/Identity-Theft-Crackdown-Sweeps-Across-the-Nation;-More-than-200-Actions-Taken-in-Past-Week-in-23-States>.

⁴⁵ <http://www.irs.gov/uac/Law-Enforcement-Assistance-Pilot-Program-on-Identity-Theft-Activity-Involving-the-IRS>; <http://www.irs.gov/uac/Newsroom/IRS-Combats-Identity-Theft-and-Refund-Fraud-on-Many-Fronts-2014>.

than 300 state/local law enforcement agencies from 35 states participating in the program. The Law Enforcement Assistance Program includes all 50 states, the District of Columbia, and U.S. territories.⁴⁶ As of May 30, 2013, the IRS has processed 2,731 waivers from 244 different law enforcement agencies.⁴⁷

3. Identify Theft Clearinghouse - CI established the Identity Theft Clearinghouse (Clearinghouse) in 2012 to provide it with a central location to review and process identity theft leads.⁴⁸ The Clearinghouse performs research on each lead to develop it for the field offices and ensure that an open investigation is not already underway. In addition, the Clearinghouse analyzes characteristics of identity theft from fraudulent refund claims and passes relevant information to the appropriate function to attempt to incorporate newly identified fraud characteristics into identity theft filters.⁴⁹ For FY 2013, the ITC received over 1,400 identity theft related leads. Those leads related to more than 391,000 tax returns claiming in excess of \$1.3 billion dollars in potentially fraudulent federal income tax refunds.⁵⁰

The Clearinghouse is similar to the Identity Theft Data Clearinghouse maintained by the Federal Trade Commission, which is the nation's repository for identity theft complaints and a part of the FTC's Consumer Sentinel Complaint database. It offers more than 2,000 law enforcement agencies a variety of tools to facilitate the investigations and prosecutions of identity theft.⁵¹

4. Data Processing Center (DPC) Identity Theft Victims List Process - This process centralizes identity theft victims' lists and information forwarded to CI by other federal, state and local agencies during nationwide investigative efforts. The information is analyzed and necessary adjustments are made to accounts of taxpayers that are likely targets of ID theft. The DPC processed over 71.7 percent more identity records in FY 2013 than it did in FY 2012.⁵²

46 *TIGTA Ref. No. 2013-40-122, p. 5*

47 *Testimony of Michael E. McKenney, footnote 38, p. 3*

48 *TIGTA recommended that the IRS develop processes to analyze identity theft characteristics in 2012. TIGTA, Ref. No. 2012-42-080, p. 12*

49 *TIGTA, Ref. No. 2013-40-122, p. 5*

50 <http://www.irs.gov/uac/Newsroom/IRS-Combats-Identity-Theft-and-Refund-Fraud-on-Many-Fronts-2014>

51 <http://www.ftc.gov/news-events/media-resources/identity-theft-and-data-security>

52 <http://www.irs.gov/uac/Newsroom/IRS-Criminal-Investigation-Combats-Identity-Theft-Refund-Fraud>

c. Monitoring direct deposit accounts

In an effort to decrease the length of time between filing a tax return and receiving the associated refund, the IRS provides for the direct deposit (which includes deposits to accounts linked to debit cards) of a refund rather than mailing a paper check.⁵³ Taxpayers provide a routing and bank account number, as well as the type of bank account, on the return, and any refund is directly deposited into that bank account.⁵⁴

Unfortunately, however, direct deposit also offers criminals the ability to quickly receive fraudulent tax refunds without the challenge of negotiating a tax refund paper check.⁵⁵ Limiting the number of tax refunds that can be directly deposited to the same tax account could minimize losses associated with fraud. Federal direct deposit regulations require that deposits be made only to an account in the name of the filer.⁵⁶ In 2008 TIGTA indicated that the IRS had not developed processes to ensure that the more than 61 million Filing Season 2008 tax refunds were deposited only to an account in the taxpayer's name.⁵⁷ TIGTA also identified as an issue the direct deposit of multiple refunds to the same bank account.⁵⁸ While the IRS acknowledged that this was an issue, it also indicated that there could be legitimate reasons for multiple deposits, such as multiple owners of the same account.⁵⁹

Four years later, TIGTA reported that the IRS still was directly depositing multiple tax refunds to the same bank account, and it identified 10 instances from the 2010 filing year where the IRS deposited more than 300 refunds to the same account.⁶⁰ The inability of the IRS to ensure the accuracy of direct deposit account information continues to be a factor in the ease with which individuals can receive fraudulent tax refunds. In testimony before a House of Representatives subcommittee at the end of 2012, the then-Deputy Commissioner for Operations Support noted that the IRS has a dual mission with refunds and that the IRS

53 *The 2013 Instructions for Form 1040, Individual Income Tax Return*, indicate that one benefit of direct deposit is "You get your refund faster by direct deposit than you do by check." p. 69

54 *In fact, taxpayers can file Form 8888, Allocation of Refund (Including Savings Bond Purchases), and have the refund deposited in up to 3 separate accounts or used to purchase U.S. Savings Bonds*

55 *TIGTA, Ref. No. 2008-40-182, Processes Are Not Sufficient to Minimize Fraud and Ensure the Accuracy of Tax Refund Direct Deposits (September 25, 2008)*, p. 7

56 *31 CFR s. 210.5(a)*

57 *TIGTA, Ref. No. 2008-40-182*, p. 6

58 *Id.*, p. 8

59 *Id.*, p. 12

60 *TIGTA, Ref. No. 2012-42-080*, p. 16. 590 refunds in the total amount of \$909,267 were made to one bank account.

must “consider the need to distribute refunds in a timely manner while also ensuring that taxpayer rights [are] protected.”⁶¹ In a 2013 report, TIGTA identified 1.2 million undetected Tax Year 2011 tax returns that were potentially fraudulent⁶² and found that 1 million (84 percent) of the tax returns used direct deposit to obtain tax refunds totaling approximately \$3.5 billion.⁶³ TIGTA again recommended that the IRS limit the number of tax refunds being sent to the same account. As TIGTA had indicated in a 2012 report, if a limit were in place, the remaining tax refunds would be converted to a paper refund check and sent to the taxpayers. While it is possible that a paper tax refund check could be sent to the identity thief, converting the paper check is more difficult than withdrawing a direct deposit. To cash a check, individuals usually have to provide picture identification matching the name on the tax refund check, in this case the name of the legitimate taxpayer. This means that the identity thief would need to obtain false identification to cash the fraudulently obtained tax refund check. This serves as another deterrent to fraud.⁶⁴

The IRS is taking steps to address these concerns. The Return Integrity and Correspondence Services (RICS) within the Wage & Investment Division is comprised of organizations that strengthen revenue protection and pre-refund compliance, administer refundable credits and provide oversight of content for all notices and letters sent to taxpayers.⁶⁵

RICS’ Accounts Management Taxpayer Assurance Program has a process in which it works with banks to obtain information on questionable tax refunds. The process relies on the banks to provide the IRS the information needed to identify tax refunds deposited to debit cards. One bank associated with an identity theft scheme provided the IRS with a list of 60,000 bank accounts, including debit card accounts, it had identified nationwide with questionable tax refunds. The bank intercepted and prevented questionable refunds totaling \$164 million from being deposited into these accounts.⁶⁶

The IRS implemented a program last year that allows financial institutions to reject direct deposit tax refunds based on mismatches

⁶¹ *Testimony of Beth Tucker, Deputy Commissioner for Operations Support, before the House Committee on Oversight and Government Reform, Subcommittee on Government Organization, Efficiency and Financial Management, November 29, 2012, p. 1*

⁶² *These “undetected” returns were identified by TIGTA as having the same characteristics as IRS-confirmed identity theft returns. TIGTA Ref. No. 2013-40-122, p. 3*

⁶³ *Id.*, p. 18

⁶⁴ *TIGTA, Ref. No. 2012-42-080, p. 15*

⁶⁵ <http://www.irs.gov/uac/Wage-&-Investment-Division-At-a-Glance>

⁶⁶ *TIGTA, Ref. No. 2012-42-080, p. 17*

between the account name and the name on the tax return. As of September 30, 2013, financial institutions had returned 20,051 refunds totally more than \$66 million.⁶⁷

The IRS is still considering how to balance the legitimate needs of multiple owners of the same bank account to receive direct deposit and the illegitimate desire of participants in refund fraud schemes to have multiple deposits made to their accounts. The IRS has developed a filtering tool that groups tax returns based on address, zip code, and/or bank routing number. The groupings are then filtered to identify potentially fraudulent tax returns. As of September 26, 2013, the IRS had identified 267,838 tax returns using these filters and prevented approximately \$817 million tax refunds from being issued.⁶⁸

d. IRS identity theft indicator codes

Identity theft indicator codes were developed to centrally track identity theft incidents. They are input to the affected taxpayer's accounts.⁶⁹ The IRS looks for identity theft, and its efforts have increased the number of cases identified. For example, while taxpayers self-identified only 110,750 incidents of identity theft for calendar year 2011, the IRS identified 1,014,884 incidents of identity theft.⁷⁰ Nevertheless, TIGTA has reported that the IRS is still missing many cases of identity theft. For tax year 2010, for example, TIGTA determined that the IRS missed 1.5 tax returns claiming fraudulent refunds in the amount of \$5.2 billion; over 5 years, this could result in \$21 billion of fraudulent refunds.⁷¹

The IRS continues to use identity theft indicator codes on taxpayer accounts to avoid sending a refund to an identity thief. After a recent TIGTA audit reporting that indicator codes are not always used when they should be, the IRS agreed to refine its procedures to ensure that appropriate indicators are recorded on taxpayer accounts to document both the opening and closing of identity theft investigations.⁷²

⁶⁷ *Testimony of J. Russell George, Treasury Inspector General for Tax Administration, Oversight Hearing – Internal Revenue Service, before the Committee on Appropriations, Subcommittee on Financial Services and General Government, U.S. House of Representatives (February 26, 2014), at <http://docs.house.gov/meetings/AP/AP23/20140226/101771/HHRG-113-AP23-Wstate-GeorgeJ-20140226.pdf>, p. 17*

⁶⁸ *Id.*

⁶⁹ *Testimony of Michael E. McKenney, footnote 38, p. 4*

⁷⁰ *TIGTA Ref. No. 2012-42-080, p. 1*

⁷¹ *Id.*, p. 3. *Although the IRS agreed that it is missing cases, it identified actions that had been taken to reduce the number of cases and did not agree that \$21 billion was an accurate number. Id.*, p. 29

⁷² *TIGTA, Ref. No. 2013-40-062, p. 7 and p. 17*

e. Social security master death file

A successful identity theft scheme usually requires an SSN.⁷³ Thieves steal these SSNs in a variety of ways.⁷⁴ One way is to read the Social Security Death Master File daily and take note of the SSNs of individuals who have died. The thieves then file a tax return early in the filing season and show a refund due. When the surviving spouse or executor of the estate files a return requesting a refund, the IRS notifies this individual that this is a duplicative return and that a refund has already been issued. Thieves also use the SSN of infants who have died to file claims for dependent exemptions and other credits.⁷⁵

In 1980, the SSA agreed to release death information following a Freedom of Information Act lawsuit.⁷⁶ Information from the Death Master File is available to purchase online through the Department of Commerce. The database contains much of the information needed to steal someone's identity: the full name, SSN, date of birth, and date of death of deceased citizens and legal residents. While the information has important legitimate users – such as the financial community, insurance companies, security firms, and state and local governments – it has also allowed criminals to file fraudulent tax returns.⁷⁷

The Bipartisan Budget Act of 2013 contains a provision to restrict the disclosure of information from the Death Master File for 3 calendar years beginning on the date of death, unless the person has been certified to receive the information.⁷⁸ The hope and expectation is that this will prevent any use of SSNs of recently deceased individuals for refund fraud.⁷⁹

⁷³ *An SSN is not required, however: Beginning in 2013, TIGTA identified cases of tax refund fraud using Individual Taxpayer Identification Numbers (ITIN), and determined that there were more than 141,000 Tax Year 2011 returns files with an ITIN that have the same characteristics as IRS-confirmed identity theft tax returns involving an ITIN. TIGTA, Ref. No. 2013-40-122, p. 3*

⁷⁴ *Examples of ways thieves steal SSNs were provided in Section II., Types of Identity Theft.*

⁷⁵ *See, e.g., the National Taxpayer Advocate's Legislative Recommendation #2 for 2011, Restrict Access to the Death Master File, at http://www.irs.gov/pub/tas/2011_arc_legrecom-mendations.pdf and <http://www.wnem.com/story/24781871/stranger-steals-dead-babys-social-security-number-to-file-taxes-for-a-recent-case-where-this-happened>.*

⁷⁶ *Perholtz v. Ross, Civil Action No. 78-2385 and 78-2386, U.S. District Court for the District of Columbia (Apr. 11, 1980)*

⁷⁷ <http://www.casey.senate.gov/newsroom/releases/budget-deal-contains-casey-backed-plan-to-crackdown-on-identity-theft>

⁷⁸ *Pub. L. No. 113-67, sec. 203*

⁷⁹ <http://www.casey.senate.gov/newsroom/releases/budget-deal-contains-casey-backed-plan-to-crackdown-on-identity-theft>

In a recent hearing of the House Appropriations Committee, it was noted, however, that the Death Master Files are still open and available for use by anyone, because the National Technical Information Service, which is responsible for maintaining the database, said it does not want to close off the file before making sure that organizations with a legitimate need still have access.⁸⁰

f. Tax return filters

The IRS has achieved the 1998 goal of receiving at least 80% of returns electronically.⁸¹ When these returns are being processed, the IRS runs the returns through a variety of filters that help identify returns that may be involved in refund fraud. The IRS recently announced that for filing year 2014, it will increase both the number and efficiency of the identity theft filters that are used to identify potentially fraudulent returns due to identity theft prior to the processing of the return and release of any refund.⁸² In 2012, TIGTA identified a number of returns that the IRS has sent through its filtering process where the return did not score high enough for a more thorough exam.⁸³ TIGTA indicated that if the IRS had more filters, then returns might score higher on the identity theft scale and result in more scrutiny and reduced refunds. It noted that the IRS increased the filters for the 2012 processing year and stopped \$1.3 billion in potentially fraudulent refunds as of April 19, 2012.⁸⁴

The IRS first developed identity theft filters for use in processing year 2012.⁸⁵ Tax returns identified via the filter process are held until the IRS can verify the taxpayer's identity. In processing year 2012, there were 11 filters that identified approximately 325,000 returns and prevented the issuance of approximately \$2.2 billion in fraudulent refunds. In processing year 2013, the number of filters increased to more than 80, and by May 30, 2013, the IRS had identified 151,000 returns and prevented the issuance of approximately \$840 in fraudulent refunds.⁸⁶ For the 2014 processing year, the IRS has designed more identity theft screening filters.⁸⁷

80 <http://www.usatoday.com/story/news/politics/2014/02/06/anti-fraud-efforts-stalled-as-death-master-file-lives-on/5231223/>

81 For processing year 2012, the IRS received over 80% of returned electronically. <http://www.irs.gov/uac/2012-Filing-Season-Statistics>

82 FS-2014-1, January 2014

83 TIGTA, Ref. No. 2012-42-080, p. 4

84 *Id.*

85 TIGTA, Ref. No. 2013-40-122, p. 4

86 *Id.*

87 <http://www.irs.gov/uac/Newsroom/IRS-Combats-Identity-Theft-and-Refund-Fraud-on-Many-Fronts-2014>

g. Identity protection PIN

The IRS introduced the “Identity Protection PIN” (IP PIN) on the 2011 Form 1040, U.S. Individual Income Tax Return, (as well as on the simpler Forms 1040A and 1040EZ) and on the 2013 Form 1040NR, U.S. Nonresident Alien Income Tax Return (as well as on the simpler Form 1040NR-EZ and Form 1040-SS for certain residents of U.S. territories).

The IP PIN is a unique six-digit number that is assigned annually to victims of identity theft whose cases have been resolved. These individuals use the IP PIN when they file their federal tax return by entering it in the space provided next to the signature line. This identifies the return to the IRS as the return filed by the actual taxpayer. Tax returns can be filed electronically or on paper, but without the IP PIN, the IRS will not accept the return or issue a refund to the taxpayer. For the 2011 processing year, before Form 1040 included a specific area to enter the IP PIN, the IRS issued 53,700 IP PINs for taxpayers to use.⁸⁸ For the 2012 processing year, when the form included the entry space, 251,568 IP PINs were issued.⁸⁹ During this 2014 filing season, the IRS expects to provide more than 1.2 million victims with resolved cases with an IP PIN, up from more than 770,000 for the 2013 filing season.⁹⁰

As part of its comprehensive identity theft strategy, the IRS has introduced a pilot project for the 2014 filing season.⁹¹ It will provide an IP PIN to a limited number of taxpayers who filed their returns last year from Florida, Georgia and the District of Columbia, the three areas identified as having the highest per capita percentage of tax-related identity theft last year. The IP PINS provided through this pilot are in addition to the IP PINs that will be issued by the IRS for the 2014 filing season to known victims of identity theft. Even if the taxpayer has moved outside these 3 jurisdictions, the IP PIN may be offered for the 2014 filing season.

The IP PIN is available to taxpayers who filed in one of those three locations last year and who need, request, and successfully obtain an Electronic Filing PIN (e-file PIN) using the online application this year. People who need an e-file PIN include those who need to e-file a return but who do not have their Self-Select PIN (used by taxpayers

⁸⁸ *TIGTA, Ref. No. 2012-42-080, p. 5*

⁸⁹ *Id.*

⁹⁰ <http://www.irs.gov/uac/Newsroom/IRS-Combats-Identity-Theft-and-Refund-Fraud-on-Many-Fronts-2014>

⁹¹ [http://www.irs.gov/uac/Newsroom/2014-Identity-Protection-PIN-\(IP-PIN\)-Pilot](http://www.irs.gov/uac/Newsroom/2014-Identity-Protection-PIN-(IP-PIN)-Pilot)

to provide the IRS their prior year adjusted gross income) or AGI from their 2012 tax return in order to verify their identity to the IRS. Eligible taxpayers who request an e-file PIN using the online application while completing their federal tax return will be taken to a new IP PIN web application to validate their identity before receiving the IP PIN. This is done using a new web application where the taxpayer will be asked a series of questions only the taxpayer should be able to answer. If the taxpayer chooses not to participate in the pilot, he/she will file the tax return in the usual way and will receive any tax refund within the usual time frame.

Taxpayers who are offered the opportunity to obtain an IP PIN under the pilot program are encouraged, but are not required, to participate in the program. The IP PIN may be used on either electronic or paper returns. If the taxpayer chooses to participate and receive an IP PIN, the taxpayer must use it on the tax return. If the taxpayer files electronically and does not use the IP PIN, the tax return will not be processed. If the taxpayer files by paper, the return will be subjected to additional review to validate the taxpayer's identity. This review will delay the processing of the tax return and the issuance of any refund that may be due.

The knowledge gained from the pilot will help the IRS determine if or when the IP PIN can be offered to a larger number of taxpayers.

h. Applying data patterns to prevent future identity theft

In 2012, TIGTA reported that the IRS uses little of the data from the identity theft cases to identify trends, etc., that could be used to detect or prevent future refund fraud and recommended that the IRS adjust its processing to track and analyze trends and patterns.⁹² For example, TIGTA's analysis of Tax Year 2010 returns with identity theft characteristics found that \$8.1 million in potentially fraudulent tax refunds involved tax returns filed from one of five addresses.⁹³

The IRS began initiatives in 2012 to better identify fraud cases. They include:

1. Establishing a team whose mission is to provide a formal mechanism for receiving, evaluating, and prioritizing new and emerging refund fraud referral issues, and developing and communicating IRS-wide solutions in real-time to protect revenue.

⁹² TIGTA Ref. No. 2012-40-050, p. 23

⁹³ TIGTA 2012-42-080, p. 9

2. Implementing the Data Mining Inventory Reduction Effort to improve the IRS's ability to verify potentially fraudulent tax returns.
3. Establishing the Accelerated Screening Group to analyze tax returns to better identify potentially fraudulent tax returns. This includes better identification of fraud patterns, including those involving Schedule C income and household servant income.⁹⁴

Although the IRS has improved the use of the filter process, TIGTA recommended in 2013 that the IRS continue to analyze characteristics of fraudulent tax returns resulting from identity theft to refine and expand filters.⁹⁵ In early 2014, the IRS indicated that it will continue to increase both the number and efficiency of the identity theft filters that are used to identify potentially fraudulent returns due to identity theft prior to the processing of the return and release of any refund.⁹⁶

i. Real-time tax system

On December 8, 2011, the IRS Commissioner held the first public meeting to discuss the IRS's long-term initiative to move to a real-time tax system.⁹⁷ A real-time tax system would allow the IRS to verify many tax return elements at the time a tax return is filed and allow taxpayers to correct potential discrepancies before the IRS completes the processing of their tax return. Currently, it is not uncommon for a taxpayer to receive a notice 12 to 18 months after a tax return is filed. GAO issued a report in June 2013 that reviewed the 2010 and 2011 tax years. For tax year 2010, over a year passed on average before the IRS notified a taxpayer of discrepancies in matching third-party information and information on the taxpayer's return.⁹⁸ This can create both problems and frustrations for the taxpayer and the IRS.⁹⁹ Of equal importance is that this type of tax system will allow the IRS to quickly identify fraudulent tax return filings based on false income reporting.¹⁰⁰ TIGTA has identified access to third-party income and withholding information at the time tax returns are processed as the single most important tool that the IRS could have to identify and prevent tax refund fraud.¹⁰¹ Delayed access to third-party income

⁹⁴ *Id.*

⁹⁵ *TIGTA Ref. No. 2013-40-122, p. 17*

⁹⁶ <http://www.irs.gov/uac/Newsroom/IRS-Combats-Identity-Theft-and-Refund-Fraud-on-Many-Fronts-2014>

⁹⁷ <http://www.irs.gov/Tax-Professionals/December-8,-2011-Meeting>

⁹⁸ *GAO-13-515, Tax Refunds: IRS Is Exploring Verification Improvements, but Needs to Better Manage Risks (June 2013), p. 12. The average was 388 days.*

⁹⁹ <http://www.irs.gov/pub/irs-utl/ir-2011-114.pdf>

¹⁰⁰ *TIGTA, Ref. No., 2012-42-080, p.5*

¹⁰¹ *Id., p. 7, and TIGTA, Ref. No. 2013-40-122, p. 5*

and withholding information makes it difficult for the IRS to detect fraudulent tax refunds at the time tax returns are processed.¹⁰² Third parties are not required to submit income and withholding documents to the IRS until March 31, yet taxpayers can begin filing tax returns in mid-January. For example, for tax year 2011, the IRS had issued 50 percent of the 2012 refunds by the end of February 2012, but it had received only 3 percent of information returns. By August, 2012, when the IRS completed its first match of information return data to tax returns, 92 percent of refunds had been issued.¹⁰³ Some information return providers routinely request filing extensions to provide the taxpayer with an opportunity to notify them of needed correction because of the penalties on filing forms with incorrect information.¹⁰⁴ However, legislative changes would be needed for any changes to the filing deadlines for information returns.¹⁰⁵

An example of how a real-time system could work is provided with information on social security benefits. The IRS receives Form SSA-1099, Social Security Benefit Statement, in December. This form includes information on social security benefits and federal income tax withholding on those benefits. Use of Form SSA-1099 information would enable the IRS to ensure that all Social Security benefits and related withholding reported on tax returns are valid at the time the tax return is filed and before tax refunds are issued. In a 2012 report, TIGTA identified almost \$232 million in potentially fraudulent tax refunds for which the false income and withholding claimed was for Social Security benefits.¹⁰⁶ At that time, the IRS had not established a process to match the information. The IRS began using Form SSA-1099 information during the 2012 filing season to identify tax returns with claims for withholding on Social Security benefits when there was no evidence of withholding on the Form SSA-1099. As a result, for the 2012 processing year, the IRS decreased the number of undetected tax returns based on fraudulent Social Security benefit income by 86 percent compared to the amount TIGTA has reported earlier.¹⁰⁷ The success continued in the 2013 processing year, when the IRS identified fraudulent 36,523 tax returns reporting \$184 million in tax refunds.¹⁰⁸

102 In fact, Michael McKenney, Acting Deputy Inspector General for Audit, TIGTA, testified that while the IRS had made some progress in addressing identity theft, "there is a portion of the problem that cannot be fully addressed until the IRS receives income and withholding information before tax return processing. Access to third-party income and withholding information at the time tax returns are processed is the single most important tool the IRS could use to detect and prevent tax fraud-related identity theft resulting from the reporting of false income and withholding." Testimony of Michael McKenney, footnote 38, at p. 5

103 GAO-13-515, p. 8

104 GAO-13-515, p. 11

105 TIGTA Ref. No. 2012-42-080, p 6

106 TIGTA Ref. No.2012-42-080, p 13

107 TIGTA Ref. No. 2013-40,122, p.6

108 Id.

TIGTA has continued to report that the IRS still does not have timely access to all third-party income and withholding information that it could use to improve its fraud detection at the time returns are filed.¹⁰⁹ The IRS continues to address this problem, recognizing concerns from stakeholders that earlier reporting would increase data errors.¹¹⁰

TIGTA also has recommended, and the IRS has requested in previous budgets, expanded IRS access to the National Directory of New Hires (NDNH).¹¹¹ The NDNH is a database that contains information on all newly hired employees. The data include the six basic elements on Form W-4, Employee's Withholding Certificate, for newly hired employees: employee's name, address, and SSN, as well as the employer's name, address, and Federal Employer Identification Number. The NDNH also includes quarterly wage information for individual employees provided by State Workforce Agencies and Federal Agencies, and unemployment information for individuals who have received or applied for unemployment benefits. Currently the IRS can access the Directory to obtain information for tax returns claiming the Earned Income Tax Credit.¹¹² If legislation were enacted to grant the IRS the authority to receive extracts from the NDNH, this information, along with third-party income and withholding information that the IRS maintains for the prior year's tax filings, could allow the IRS to better identify individuals filing fraudulent tax returns. The IRS could design a process that uses prior year third-party wage and withholding reporting documents and NDNH data to determine if the reported wages and withholding on a tax return appear false.¹¹³

The Treasury Budget for Fiscal Year 2015 includes a proposal to require that all information returns be provided to the IRS by January 31, with the exception Form 1099-B, the Broker Statement.¹¹⁴

¹⁰⁹ *Id.*, p 5

¹¹⁰ *Id.*, p. 7

¹¹¹ TIGTA Ref. No. 2012-42-080, pp. 7-8; *Testimony of The Honorable J. Russell George (November 29, 2012), footnote 37, p. 3; Testimony of The Honorable J. Russell George Treasury Inspector General for Tax Administration, Identity Theft and Tax Fraud, before the Committee on Ways and Means, Subcommittees on Oversight and Social Security (May 8, 2012), p. 4; Department of the Treasury, General Explanations of the Administration's Fiscal Year 2014 Revenue Proposals, p. 192*

¹¹² TIGTA Ref. No. 2010-40-129, *Expanded Access to Wage and Withholding Information Can Improve Identification of Fraudulent Tax Returns (September 30, 2010), p. 5*

¹¹³ TIGTA Ref. No. 2012-42-080, p 8

¹¹⁴ *Department of the Treasury, General Explanations of the Administration's Fiscal Year 2015 Revenue Proposals, p. 246*

4. CONCLUSION

The IRS is faced with the dual, sometimes contradictory, goals of processing returns quickly to provide fast refunds while protecting taxpayers' identities and eliminating tax fraud. To achieve these goals, it uses many tools, including more sophisticated identity filters and grouping techniques as well as simple IP PINs that must be manually entered on a return. In recognition of these goals and challenges, the IRS has requested an increase in both funding and personnel to continue addressing identity theft, including an expansion of the specialized Criminal Investigation Identity Theft Clearinghouse that processes identity theft leads; and investment in information technology that will protect taxpayer information, help verify potentially fraudulent identity theft tax returns, and reduce erroneous payments.¹¹⁵

115 U.S. Department of the Treasury, Budget in Brief, Fiscal Year 2015, p. 64

**PRESENTATIONS AND VIDEOS
OF THE
48TH CIAT GENERAL ASSEMBLY**

Presentations and videos of the 48th CIAT General Assembly

Presentations in PDF format and videos of the main topics and case studies to be discussed at the 48th CIAT General Assembly, according to the technical program of the event. They may be found in the links which indicate the languages in which they are available.

	Presentations	Videos
Inaugural Conference: Needles in Stack of Needles: Detecting Tax Fraud & Evasion Through Big Data		
Hong-Eng Koh (Oracle)		Video
Topic 1: The use of electronic documents in tax administration		
Brazil	Spanish English Portuguese	
Topic 1.1: Electronic documents. Solutions for Small and Medium Enterprises		
Mexico	Spanish	
ENCAT, Brazil	Portuguese	
Topic 1.2: Other innovations in the use of electronic systems		
Argentina	Spanish	
Topic 2: Information and Communication Technologies for providing taxpayer services		
OCDE	English	
Topic 2.1. Innovative implementations for simplifying processes		
Guatemala	Spanish	
Peru	Spanish English	
Topic 2.2. Taxpayer assistance channels and platforms		
Portugal	English	
South Africa	English	
Jamaica	English	
People's Republic of China	English	
Topic 2.3. Other innovative solutions for filing returns		
Norway	English	

	Presentations	Videos
Topic 3. Information and Communication Technologies and tax control		
Canada	Spanish English Portuguese	
Topic 3.1. Data mining and other applications in financial and tax crime investigations		
Italy	English	
Topic 3.2. Electronic applications for controlling individual and property files		
France	French Spanish English	
USA	Spanish English	
Topic 4: Round Table		
Oracle, MicroSoft, Argentina (AFIP), Brazil (SERPRO), Paperless LA, CIAT		Video
Final considerations		
Raúl Zambrano (CIAT)	Spanish English	Video

DAILY SCHEDULE OF ACTIVITIES

48TH CIAT GENERAL ASSEMBLY
Rio de Janeiro, Brazil
May 5 - 8, 2014

DAILY SCHEDULE OF ACTIVITIES

**MAIN TOPIC: “THE USE OF INFORMATION AND
COMMUNICATION TECHNOLOGIES IN THE
TAX ADMINISTRATION”**

Monday, May 5

- 9:10 - 9:55 Inaugural Ceremony
Statement by the CIAT Executive Secretary,
Márcio F. Verdi Statement by the Representative
of the Executive Council President, Angel Rubén
Toninelli, Director General, Federal Administration
of Public Revenues, Argentina
- Welcome Statement by Secretariat of Federal
Revenues of Brazil, Carlos Barreto
- 9:55 - 10:40 Inaugural Conference: Hong-Eng Koh, Vice
President (Oracle)
“Needles in Stack of Needles: Detecting Tax Fraud &
Evasion Through Big Data”
- 10:40 - 11:10 Official photograph, coffee and integration

Topic 1

- 11:10 - 12:40 **Topic 1: The use of electronic
documents in tax
administration**
- 11:10 - 11:20 **Moderator:** Angel Rubén Toninelli, Director
General, Federal Administration
of Public Revenues, Argentina

11:20 - 11:50	Speaker:	The Brazilian experience in electronic documentation Carlos Barreto, Secretary of the Federal Revenue, Federal Revenues of Brazil; Carlos Roberto Occaso, Undersecretary of Revenue and Assistance, Federal Revenue of Brazil
11:50 - 12:10	Commentators:	Saverio Capolupo, Commander General, Guardia di Finanza, Italy and Márcio F. Verdi, CIAT Executive Secretary
12:10 - 12:40		Discussion
12:40 - 14:00		Lunch
14:00 - 15:45	Subtopic 1.1:	Electronic documents. Solutions for Small and Medium Enterprises
14:00 - 14:05	Moderator:	Khurshid Sattaur, Commissioner General, Guyana Revenue Authority.
14:05 - 14:25	Speaker:	Electronic documents. Solutions for Small and Medium Enterprises - Experience of Chile Ricardo Pizarro, Internal Revenue Service, Chile
14:25 - 14:45	Speaker:	Cooperation with the private sector for the use of electronic invoices in retail sales - Case of Mexico Guillermo Valls, General Administrator, Tax Administration Service, Mexico
14:45 - 15:05	Speaker:	Cooperation with the private sector for the use of electronic invoices in retail sales Eudaldo Almeida De Jesus, ENCAT, Coordinator, Brazil

15:05 - 15:25	Speaker:	Prepaid phone credits as a means of payment Ezekiel Saina, Deputy Commissioner, Kenya Revenue Authority
15:25 - 15:45	Discussion	
15:45 - 16:05	Coffee & integration	
16:05 - 17:35	Subtopic 1.2:	Other innovations in the use of electronic systems
16:05 - 16:15	Moderator:	Raúl Zambrano, Technical Assistance and Information, Technology and Communication, Director, CIAT
16:15 - 16:35	Speaker:	Towards a 100% digital Netherlands Tax and Customs Administration Peter Veld, Commissioner, The Tax and Customs Administration, The Netherlands
16:35 - 16:55	Speaker:	The Control of Social Security Payments, E-Social — Igaro Martins, Undersecretary, Receita Federal do Brasil
16:55 - 17:15	Orador:	The Control of Goods in Transit, Brasil-ID — Eudaldo Almeida de Jesus, ENCAT, Coordinator
17:15 - 17:35	Discussion	

Tuesday, May 6, 2014

9:00 - 10:20	Topic 2:	Information and Communication Technologies for providing taxpayer services
9:00 - 9:05	Moderator:	Andrea Lemgruber, Deputy Division Chief, Fiscal Affairs Department, FMI

- 9:05 - 9:35 **Speaker:** **Information and Communication Technologies at the service of the taxpayer**
Santiago Menéndez Menéndez,
General Director, State Agency of
Tax Administration, Spain
- 9:35 - 9:55 **Commentator:** Grace Perez Navarro, Deputy
Director, Centre for Tax Policy
and Administration, OECD
- 9:55 - 10:20 **Discussion**
- 10:20 - 10:40 **Coffee & integration**
- 10:40 - 12:05 **Subtopic 2.1: Innovative implementations for simplifying processes**
- 10:40 - 10:45 **Moderator:** Sergio Mujica, Deputy Executive
Secretary, WCO
- 10:45 - 11:05 **Speaker:** **Innovations in tax administration utilizing mobile Platform**
Daniel Laffitte, Director,
Information Systems Department,
General Directorate of Taxation,
Uruguay
- 11:05 - 11:25 **Speaker:** **The use of Technology in exempt services for Diplomats**
Carlos Muñoz, Superintendent,
Superintendency of Tax
Administration, Guatemala
- 11:25 - 11:45 **Speaker:** **“CONTAC CENTER SUNAT: Improving the relationship with citizens/taxpayers”**
Tania Quispe, National Tax
Superintendent, National
Superintendency of Customs and
Tax Administration, Peru
- 11:45 - 12:05 **Discussion**

12:05 - 13:50	Subtopic 2.2:	Taxpayer assistance channels and platforms
12:05 - 12:10	Moderator:	Mary Allison Raphael, Chairman, Board of Inland Revenue, Trinidad & Tobago
12:10 - 12:30	Speaker:	Experience of Portugal Jose Antonio de Azevedo Pereira, General Director, General Directorate of Taxes, Portugal
12:30 - 12:50	Speaker:	Experience of South Africa Hope Tau Mashigo, Chief Information Officer, South African Revenue Services
12:50 - 13:10	Speaker:	Experience of Jamaica Meris Haughton, Director, Communication (acting) Tax Administration, Jamaica
13:10 - 13:30	Speaker:	Experience of Republic of China Lan Song, Deputy Commissioner State Administration of Taxation, People's Republic of China
13:30 - 13:50	Discussion	
13:50 - 15:00	Lunch	
15:00 - 18:00		Administrative Session of the CIAT General Assembly (Only for Representatives and delegates of CIAT member countries)

Wednesday, May 7, 2014

	Topic 2:	Information and Communication Technologies for providing taxpayer services (continuation)
9:00 - 10:30	Subtopic 2.3:	Other innovative solutions for filing returns

Technical Program

9:00 - 9:05	Moderator:	Ramón Pérez, Deputy Director General, General Directorate of Internal Taxes, El Salvador
9:05 - 9:25	Speaker:	Electronic filing in Brazil Claudia Maria Andrade, General Coordinator of Information Technology, Federal Revenue of Brazil
9:25 - 9:45	Speaker:	Electronic filing of pay-as-you-earn (PAYE) Wayne Forde, Director of Shared Services, Barbados Revenue Authority,
9:45 - 10:05	Speaker:	Use of electronic services for the management of tax affairs Karl Olav Wroldsen, CIO of the Norwegian tax administration
10:05 - 10:30	Discussion	
10:30 - 11:00	Coffee and integration	
11:00 -12:20	Topic 3:	Information and Communication Technologies and tax control
11:00 - 11:05	Moderator:	Guilliano Saturnilia, Head Audit and Criminal Investigation Department, Ministry of Finance, Sint Maarten
11:05 - 11:35	Speaker:	The use of “Business Intelligence” for tax control purposes Brian McCauley, Assistant Commissioner, Canada Revenue Agency
11:35 - 11:55	Commentator:	Luis Cremades Ugarte, Head of the Spanish Mission before CIAT.
11:55 - 12:20	Discussion	
12:20 - 13:50	Lunch	

13:50 - 15:00	Subtopic 3.1:	Data mining and other applications in financial and tax crime investigationsd
13:50 - 13:55	Moderator:	Roland Von Frankenhorst, Head of Project, International Tax Compact
13:55 - 14:15	Speaker:	Experience of Italy Giampiero Ianni, Head of International Cooperation Office, Guardia di Finanzas, Italy
14:15 - 14:35	Speaker:	Experience of India R.K. Tewari, Chairman of the Central Board of Direct Taxes, of India Revenue Department
14:35 - 15:00	Discussion	
15:00 - 16:30	Subtopic 3.2	Electronic applications for controlling individual and property files
15:00 - 15:05	Moderator:	Joerg Wisner, Germany Head of Mission-GIZ
15:05 - 15:25	Speaker:	The digital map and applications for controlling real estate registration Etienne Lepage, Head of the Headquarter's Office for Land Registry, Directorate General of Public Finances, France
15:25 - 15:45	Speaker:	The biometric registry. Challenges and opportunities Erick Ariñez Bazzan, Executive Chairman (a.i) National Tax Service, Bolivia
15:45 - 16:05	Speaker:	Identity theft: Challenges and opportunities Douglas O'Donnell, Assistant Deputy (International) Commissioner, IRS, USA
16:05 - 16:30	Discussion	

Thursday, May 8, 2014

Topic 4: Round Table

- 9:00 - 11:00 **Topic: The future of the tax administration and the role of technology**
- Moderator:** Jeffrey Owens, Director of Wu Global Tax Policy Center, Institute for Austrian and International Tax Law, Wu, University of Vienna
- Participants:** Oracle (Benjamin Schutz), MicroSoft (Djalma Andrade), Argentina (Angel Rubén Toninelli), Brazil- SERPRO (Marcos Mazoni), CIAT (Raúl Zambrano), Paperless LA, (Ivan Beltrand)
- 11:00 - 11:30 Coffee and integration
- 11:30 - 12:45 Closing
- 11:30 - 12:00 **Rapporteur:** Raúl Zambrano, Technical Assistance and Information Technology and Communication Director, CIAT
- 12:00 - 12:15 Invitation to 2014 Technical Conference **Spain**
- 12:15 - 12:30 Invitation to 2015 General Assembly **Peru**
- 12:30 - 12:45 Closing Ceremony **President Executive Council**
- 12:45 - 14:00 Lunch
- 14:00 - 18:00 Integration

LIST OF PARTICIPANTS

48ª. CIAT GENERAL ASSEMBLY

Rio de Janeiro, Brasil

May 22 to 25, 2013

LIST OF PARTICIPANTS

ADAM SMITH INTERNATIONAL

Graeme Keay

Senior Tax and Legal Adviser

ANGOLA

Simão Antonio Carvalho Neto

Director de Ti

Ministerio de Finanzas

Ernestina Cunha

Chefe de Repartição

Ministerio de Finanzas

Alice Paula Neves

Directora Nacional

Ministerio de Finanzas

Samuel N´zita

Chefe de Repartição

Ministerio de Finanzas

Euclides Joaquim Paxe

Jefe de Departamento

Ministerio de Finanzas

Itatiano Rufino

Coordinador Adjunto

Ministerio de Finanzas

Marcelo Oliveira

Consultor

Jupiter Desenvolvimento Informático Lda

ARGENTINA

Maria Luisa Carbonell

Directora de la Dirección de Asuntos

Internacionales

AFIP

Angel Rubén Toninelli

Director General Dirección General Impositiva

AFIP

ATAF

Elizabeth Storbeck

Specialist: Institutional Development

BANCO DE PREVISIÓN SOCIAL

Hugo Odizzio

Director

BARBADOS

Wayne Forde

Director of Shared Services

Barbados Revenue Authority

BELGICA

Carlos Six

General Manager of the Tax Administration

Fps Finance

BOLIVARIAN REPUBLIC OF VENEZUELA

Fanny Beatriz Márquez Cordero

Intendente Nacional de Tributos Internos

SENIAT

Mario José Pires Azuaje

Asesor Adjunto a la Intendencia Nacional de

Tributos

SENIAT

List of Participants

BOLIVIA

Erik Ariñez

Presidente Ejecutivo A.i.
Servicio de Impuestos Nacionales

Juana Patricia Jiménez Soto

Staff I, Investigación Tributaria
Servicio de Impuestos Nacionales

Luis Alberto Ustares Gomez

Profesional
Servicio de Impuestos Nacionales

BRAZIL

Flávio Antônio Araújo

Coordenador-Geral de Relações Internacionais
Secretaria da Receita Federal do Brasil

Carlos Alberto Barreto

Secretário
Secretaria da Receita Federal do Brasil

BRAZIL –INVITADOS

Elaine Polo Pereira

Superintendente Regional
Secretaria da Receita Federal

Patricia Arruda Aragão

Assistente Técnico Administrativo
Receita Federal Brasil

María Angélica Barreto

Auditora - Fiscal
Receita Federal Brasil

Claudia Maria de Andrade

Auditor Fiscal
Receita Federal do Brasil

Denise Fernandez

Auditora Fiscal da Rfb
Receita Federal do Brasil

Renata Maria Gasparini

Superintendente
Receita Federal do Brasil

Jacqueline Pereira

Chefe do Cerimonial Rfb
Receita Federal

Erica Maria Teixeira De Andrade

Chefe da Divisão de Imprensa
Receita Federal

Silvana Maria Lisboa Lima

Superintendente de Gestão Tributária
Secretaria de Estado da Fazenda

Sandra Machado

Secretaria Executiva
Secretaria da Fazenda do Estado do Ceará

Adria Carla Müller

Auditora Fiscal
SEFAZ-To

Márcia Mantovani

Auditor Fiscal
SEFAZ-To

Katia Borges

Coordenadora
SEFAZ-To

Myrian Oliveira

Auditor Fiscal do Tesouro Estadual
Secretaria da Fazenda do Estado de Pernambuco

Maria Aparecida Fernandes Paes Leme

Vice-Presidente de Relações Públicas
Anfip Assoc. Nac. Auditores-fiscais da Receita
Federal do Brasil

Marcelo A. Pupo Barboza

Agente Fiscal de Rendas
Secretaria da Fazenda de São Paulo

Omar Afif Alemsan

Auditor Fiscal da Receita Estadual
Secretaria da Fazenda de Santa Catarina

Jader Afonso

Secretário de Fazenda
Sefaz – Ms

Carlos Alberto Agostini
 Presidente da Cogef
 Comissão de Gestão Fazendária

Marcelo Luiz Alves Fernandez
 Agente Fiscal de Rendas
 Secretaria da Fazenda do Estado de São Paulo

José Guilherme Antunes de Vasconcel
 Superintendente
 Receita Federal

Raimundo Antonio Simões Aragão
 Cerimonialista
 Receita Federal do Brasil

José Barroso Tostes Neto
 Secretário
 Secretaria de Fazenda do Estado do Pará

Zayda Bastos Manatta
 Auditor Fiscal
 Secretaria Da Receita Federal do Brasil

Luiz Bernardi
 Superintendente
 Receita Federal do Brasil 9ª Região Fiscal

Roberto Bertoncini
 Presidente
 ABRASF

Ricardo Brand Brand
 Presidente
 Sinfrerj

Marcelo Camoes
 Auditor – Fiscal
 Receita Federal

Celia Maria Silva Carvalho
 Presidente
 GEFIN/CONFAZ

Charles Johnson da Silva Alcan
Charles Alcantara
 Diretor de Comunicação
 Fenafisco

Renato Wilson Chaves Lima Júnior
 Coordenador de Assuntos Tributários e
 Aduaneiros
 Secretaria da Receita Federal do Brasil

Leonardo Costa
 Auditor Fiscal
 Secretaria de Fazenda do Estado do Rio de
 Janeiro

André Gustavo Costa Cunha Oliveira
 Assessoria de Comunicação Social
 Receita Federal do Brasil

Mauro Ferreira Dal Bianco
 Auditor Fiscal
 Sec. da Fazenda do Estado do Paraná

Lucas Syrto Octavio De Souza
 Auditor – Fiscal
 Secretaria Receita Federal

Claudia Marcia Dias
 Auditor Fiscal da Rfb
 Receita Federal do Brasil

João Carlos Do Nascimento Silva
 Assessor do Subsecretário da Receita
 Secretaria de Fazenda

Silvio Dos Santos Braga
 Receita Federal do Brasil

Rosana Escudero
 Auditora-fiscal da Rfb/equipe Do Cerimonial
 Receita Federal do Brasil

Esdras Esnarriaga Junior
 Superintendente Regional
 Receita Federal Brasil

Sonia Regina Ewald Marques
 Chefe da Equipe do Cerimonial da 7ª Rf
 Cerimonial – Rfb

Bruno Gouvea Bastos
 Fiscal de Rendas
 Secretaria de Estado de Fazenda

List of Participants

Newton Berford Guaraná

Subsecretario Adjunto da Receita Estadual
Secretaria da Fazenda do Estado do Rio Grande do Sul

Wilson José De Paula

Subsecretário da Receita
Secretaria de Fazenda do Distrito Federal

Marcelio Lima

Diretor
SEFAZ – To

Eli Lombardi

Auditor Fiscal
Secretaria de Fazenda do Paraná

Ricardo Lonzetti

Auditor Fiscal da Receita Estadual
Secretaria da Fazenda de Santa Catarina

Margarida Lopes De Araújo

Presidente do Conselho Executivo
Anfip Assoc. Nac. Auditores-fiscais da Receita Federal do Br

Hermano Machado

S/n
Receita Federal Do Brasil

Itamar Magalhaes

Auditor da Receita Estadual
Sefaz/ac

Joao Marcos Maia

Secretario da Fazenda
Secretaria da Fazenda do Estado do Ceara

Lilian Marques

Secretaria Adjunta da Receita Estadual
Sefaz/ac

Lágaro Jung Martins

Coordenador-Geral de Fiscalização
Receita Federal Brasil

Teruo Massita

Presidente

AFRESP

João Marcelo Medeiros

Auditor – Fiscal
Secretaria da Receita Federal Brasil

Marcelo Melo

Subsecretário de Gestão Corporativa
Receita Federal

Moacyr Mondardo Junior

Superintendente
Receita Federal

Newton Oller De Mello

Líder Nacional Projeto Nfce
Secretaria da Fazenda do Estado de São Paulo

Sidney Ottoni

Jornalista
Receita Federal

Gilberto Paganotto

Diretor-Superintendente
Serviço Federal de Processamento de Dados

Jeferson Dantas Passos

Secretário
Secretaria de Estado da Fazenda

José Roberto Pedroza

Fotógrafo
Receita Federal

Ricardo Neves Pereira

Subsecretario da Receita Estadual
Secretaria da Fazenda do Estado do Rio Grande do Sul

Luís Fernando Pereira da Silva

Auditor Fiscal de Tributos Estaduais
Secretaria de Finanças do Estado de Rondônia
- SEFIN

Vinicius Pimentel De Freitas

Especialista
ENCAT

Myrthes Pinheiro

Gestora Chefe
Sefaz/MA

Jorge Tonetto

Gefin
Confaz

Marcus Pontes

Superintendente - Adjunto 7ª
Receita Federal

Roque Luiz Wandenkolk

Analista -Tributario da RFB
Secretaria da Receita Federal do Brasil

Carlos Romeu Queiroz

Superintendente
Receita Federal do Brasil

Eudaldo Almeida De Jesus

Coordenador
Sefaz Bahia

Marcio Rocha

Auditor Fiscal
Receita Federal

Ernani Checcucci

Subsecretário de Aduanas E Relações
Internacionais
Receita Federal

Chaim Ruchleimer

Consultor Ti Aplicadai
SEFAZ

Carlos Roberto Occaso

Subsecretário de Arrecadação e Atendimento
Secretaria da Receita Federal do Brasil

Marco Aurelio Santos Cardoso

Secretário Municipal de Fazenda
Prefeitura da Cidade do Rio de Janeiro

Jonil Vital de Souza

Secretario Adjunto da Receita Pública
SEFAZ - MT

Jose Luiz Santos Souza

Superintendente
Secretaria da Fazenda do Estado da Bahia

Cristovam Colombo Dos Santos C

Cristovam Cruz

Auditor Fiscal
Sefaz-Pi

Gerson Schaan

Coordenador-geral de Pesquisa e Investigação
Secretaria da Receita Federal Brasil

Roberto Neve De Sá Roberto

Auditor Fiscal
SEFAZ/PE

Jorge Silva

Fiscal de Tributos
SEFAZ – Mt

Cristiano Souza De Oliveira

Auditor Fiscal da Receita Estadual
Secretaria da Fazenda de Santa Catarina

Paulo Renato Silva Da Paz

Superintendente Regional
Receita Federal do Brasil

BRITISH VIRGIN ISLANDS

Armando Mario Da Silva Filho Silva Filho

Auditor Fiscal de Tributos
Governo do Estado de Rondônia

Karen Smith-Aaron

Commissioner of Inland Revenue
Government of the BVI

CANADA

Vinicius Sucena

Assessor Técnico
Presidencia de la República

Brian McCauley

Assistant Commissioner
Canada Revenue Agency

Jose Augusto T S Carneiro

Auditor-Fiscal Receita Federal Brasil
Receita Federal

List of Participants

Bruce Snider
Manager International Relations Office
Canada Revenue Agency

CHILE

Michel Jorratt
Director
Servicio de Impuestos Internos

Ricardo Pizarro
Jefe Departamento
Servicio de Impuestos Internos

CHINESE-TAIPEI

Bi-Chen Tsai
Deputy Director-General
Taxation Administration, Ministry of Finance

CIAT

Márcio Ferreira Verdi
Secretario Ejecutivo

Socorro Velázquez
Director de Planificación y Desarrollo Institucional

Miguel Pecho
Director de Estudios e Investigaciones Tributarias

Francisco Beiner
Director de Operaciones y Gestión Institucional

Isaac Gonzalo Arias Esteban
Director de Cooperación y Tributación
Internacional

Raúl Zambrano Valencia
Director de Asistencia Técnica

Maria Raquel Ayala Doval
Directora de Capacitación y Formación del Talento

María Bell
Coordinadora de Eventos Institucionales

CIAT-INVITADOS

Regina Barroso
Invitada
CIAT

Issel Perozo
Consultora
CIAT

Alvaro Bahía
Consultor
CIAT

Reinhold Basse
Consultant
Dse / Inwent

Leonardo Javier Belen
Consultor
CIAT

Daniel Brusa
Consultor
CIAT

Decio Carretta
Consultor
CIAT

Javier Cordero Ordóñez
Representante Ecuador
CIAT

Paulo Dos Santos
Consultor
Independiente

Ricardo Escobar
Socio
Bofill Escobar Abogados

Raul Falkenbach
Consultor
CIAT

Manuel Garcia

Consultor
CIAT

Braulio Gusmao

Consultor
CIAT

Roberto Kupski

Febrafite - Federação Brasileira De Associações
De Fiscais D

Gilberto Luther

Director Adjunto
Pert - Ministerio das Financas

Roberto Medici Kacinskis

Consultor
CIAT

Roberto Pereira

Consultor
CIAT

Nicolás Ramírez

Consultor
CIAT

Carlos Alberto Rubinstein

Subdirector General de Cobranzas
AGIP

Antonio Seco

Consultor
Ministério das Finanças

Carlos Walter

Administrador Gubernamental de Ingresos
Publicos
AGIP

COLOMBIA

Christian Rafael Jaramillo Herrera

Director de Gestión Organizacional
Dirección De Impuestos Y Aduanas Nacionales

Victoria Valencia

Consultora
Irana

CREDAF

Gilles Berteau

Executive Secretary

Didier Cornillet

Adviser

CUBA

Yolanda Álvarez

Jefa
ONAT

Marisol Hernández Martínez

Directora Provincia La Habana
ONAT

**Esperanza De La Candelaria Recio
Socarrás**

Vicejefa Primera
ONAT

ECLAC

Juan Pablo Jiménez

Oficial de Asuntos Económicos
CEPAL, Naciones Unidas

ECUADOR

Ximena Amoroso Iñiguez

Director General
Servicio de Rentas Internas

Mauro Alejandro Andino Alarcón

Director de Planificación
Servicio de Rentas Internas

EL SALVADOR

Luis Fernando Díaz

Director de Fiscalización
Dirección General de Impuestos Internos

List of Participants

Ramón Perez

Subdirector
Dirección General de Impuestos Internos

ESAF - MF – BRASIL**Alexandre Ribeiro Motta**

Diretor-Geral
ESAF

Paulo Mauger

Diretor de Cooperação Técnica
ESAF

FINLANDIA**Pekka Ruuhonen**

Director General
Finnish Tax Administration

FRANCIA**Isabelle Gaetan**

Jefa Misión Francesa ante el CIAT

Josiane Lanteri

Head of the International Cooperation Department
Public Finances General Directorate

Etienne Lepage

Head of the Headquarter's Office for Land
Registry
Directorate General of Public Finances

FUNDAÇÃO GETÚLIO VARGAS**José Roberto Afonso**

Economista
IBRE/fgv

GIZ**Peter Dineiger**

Program Leader
GIZ

Roland Von Frankenhorst

Head of ITC Project
International Tax Compact- ITC

Jörg Wisner

Project Manager
GIZ

GRENADA**Raphael C. Stephen**

Comptroller
Government of Grenada

GUATEMALA**Henry Almengor**

Director Titular
Superintendencia de Administración Tributaria

Carlos Muñoz

Superintendente
Superintendencia de Administración Tributaria

Mario Riveiro

Gerente de Planificación y Desarrollo Institucional
Superintendencia de Administración Tributaria

Mario Velasco

Director Titular
Superintendencia de Administración Tributaria

GUYANA**Khurshid Sattaur**

Commissioner – General
Guyana Revenue Authority

HAITI**Chrysostome Luc Emmanuel**

Director
Direction Generale des Impots - DGI

Serge Jr Rosenthal

Director of Projects
Direction Generale des Impots

HONDURAS**Miriam Estela Guzmán Bonilla**

Ministra
Dirección Ejecutiva de Ingresos

IBFD

Lydia Griselda Ogazón Juárez
Senior Research Associate

Victor Van Kommer
Director Tax Services

IDB

Patricia Bakaj
Especialista Senior Gestao Fiscal e Municipal

Maria Cristina Mac Dowell
Especialista Senior Fiscal

Ana Lucia Paiva Dezolt
Especialista Senior Gestao Fiscal e Municipal

**Maria de Fátima Pessoa De Mello
Cartaxo**
Especialista

IEFPA

Raúl Eduardo Roa
Presidente

IFC - WORLD BANK GROUP

Ana Cebreiro
Program Leader for Business Taxation
IFC - World Bank Group

**INTERNATIONAL MONETARY FUND-
IMF**

Monica Calijuri
Experta Residente
CAPTAC-RD - IMF

Andrea Lemgruber
Deputy Division Chief
Fiscal Affairs Department

INDIA

Sanjeev Singh
Director of Income Tax (Systems)
Central Board of Direct Taxes

R K Tewari
Chairman
Central Board of Direct Taxes

IOTA

Eugenijus Soldatkovas
Technical Taxation Expert

ITALY

Saverio Capolupo
Comandante General
Guardia di Finanza

Paolo Cussotto
Agregado
Guardia di Finanza

Stefano Gesuelli
Jefe de la Misión Italiana ante el CIAT
Guardia di Finanza

Giampiero Ianni
Jefe Oficina Cooperación Internacional
Guardia di Finanza

Giuseppe Riccio
Asesor del Director General
Guardia di Finanza

JAMAICA

Meris Haughton
Director Communications
Tax Administration Jamaica

List of Participants

KENYA

Josephat Omondi Afwambo

Deputy Commissioner- Finance
Kenya Revenue Authority

Ezekiel Saina

Cio
Kenya Revenue Authority

KOREA

Hyon Min Choi

Assistant Commissioner
National Tax Service

Jeong Ahn Kwak

Deputy Director
National Tax Service

LEOSOTO

Thabo Michael Letjama

Commissioner General
Lesotho Revenue Authority

MALASIA

Mohd Shukor Mahfar

Chief Executive Officer/Director General
Inland Revenue Board of Malaysia

Norhanadia Samsudin

Principal Assistant Director, Multinational Tax
Inland Revenue Board of Malaysia

Abd Rahman Yusof

Director Strategic & Information Management
Division
Inland Revenue Board of Malaysia

MEXICO

Adrián Guarneros

Administrador General de Planeación
Servicio de Administración Tributaria

Fernando Martínez Coss

Administrador
Servicio de Administración Tributaria

Guillermo Valls Esponda

Administrador General
Servicio De Administración Tributaria

NETHERLANDS

Marian Bette

Senior Policy Officer
Netherlands Tax and Customs Administration

Edward Thielman

Teamleader Customs/Deputy Director Tax Office
Cn
Tax Office Caribisch Nederland (Belastingdienst
Cn)

Peter Veld

Commissioner
Netherlands Tax and Customs Administration

NICARAGUA

Francisco Baltodano

Director de Fiscalización
Dirección General de Ingresos

José Bladimir García Sanchez

Director de Informática y Sistemas
Dirección General de Ingresos

NORWAY

Egil Martinsen

International Director
Directorate of Taxes

OCDE

Grace Perez-Navarro

Deputy Director, Centre for Tax Policy and
Administration

OECD- KOREA

Jong-Su Lee

Director
Tax Programme, Oecd Korea Policy Centre

Dong Hyun Lim
Global Relations Manager
Tax Programme, Oecd Korea Policy Centre

ORACLE CORPORATION

Hong-Eng Koh
Global Lead, Justice & Public Safety
Oracle Corporation

PANAMA

Luis Cucalón
Administrador Nacional
Autoridad Nacional de Ingresos Públicos

PAPERLESS

Ivan Beltrand
Gerente

PARAGUAY

Roberto Jose Castillo Rodriguez
Coordinador
Subsecretaria de Estado de Tributación (SET)

Luis Javier Corvalán Franco
Director de Tic
Subsecretaría de Estado de Tributación - SET

Marta Beatriz González Ayala
Viceministra
Subsecretaria de Estado de Tributación

Alba Servin
Jefa Dpto. de Cooperación
Subsecretaría de Estado de Tributación

PEOPLE'S REPUBLIC OF CHINA

Lixin Rao
Director General
State Administration of Taxation

Lan Song
Deputy Commissioner
State Administration of Taxation

PERU

Tania Quispe
Superintendente
SUNAT

Enrique Vejarano
Superintendente Nacional Adjunto de Tributos
Internos
SUNAT

Alexandra Berckemeyer
Gerente
SUNAT

Amador Ernesto Meza Marotta
Intendente Nacional
SUNAT

PORTUGAL

Jose Antonio Azevedo Pereira
Diretor-General
Autoridade Tributaria e Aduaneira

Miguel Silva Pinto
Subdiretor-General
Autoridade Tributaria e Aduaneira

RUSSIA

Maxim Nikitin
Third Secretary
Embassy of Russian Federation

SERPRO - MF- BRASIL

André De Cesero
Superintendente

**Marcos Vinícius Ferreira Mazon
Mazoni**
Diretor-Presidente

List of Participants

SINT MAARTEN

Guilliano Saturnilia

Head Audit And Criminal Investigation
Tax Administration Sint Maarten

SPAIN

Ignacio Corral Guadaño

Delegado del IEF
Ministerio de Hacienda y Administraciones
Públicas

Luis Cremades

Jefe de la Misión Española ante el CIAT
AEAT

Ignacio Del Rio

Jefe Unidad de Coordinación de Relaciones
Internacionales
AEAT

Manuel José Díaz Corral

Director de la Escuela de Hacienda Pública - IEF
Ministerio de Hacienda y Administraciones
Públicas

Santiago Menéndez

Director General
AEAT

SOUTH AFRICA

Hope Tau Mashigo

Chief Information Officer
South African Revenue Services

SWEDEN

Anders Stridh

Strategist
Swedish Tax Agency

TANZANIA

Neema Mrema

Commissioner
Tanzania Revenue Authority

Grace Stephen Senge

Principal Accountant
Tanzania Revenue Authority

Kenneth Wakati

Director Ict
Tanzania Revenue Authority

TRINIDAD & TOBAGO

Sabeta Lall

Director of Revenue Training
Board of Inland Revenue, Ministry of Finance

Mary Allison Raphael

Chairman
Inland Revenue Division

UN-DESA

Alexander Trepelkov

Director, Financing for Development Office
Department of Economic and Social Affairs (UN-
DESA)

UNITED STATES OF AMERICA

Douglas O'donnell

Assistant Deputy Commissioner (International)
Internal Revenue Service

Raul Pertierra

Revenue Service Representative
Internal Revenue Service

UNIVERSIDAD DE VIENA

Jeffrey Owens

Director of Wu Global Tax Policy Center
Institute for Austrian and International Tax Law,
Wu (Vienna)

**UNIVERSIDAD EXTERNADO DE
COLOMBIA**

Olga Lucia Gonzalez Parra
Coordinadora Académica

Julio Roberto Piza Rodriguez
Director Departamento Derecho Fiscal

URUGUAY

Pablo Ferreri
Director General de Rentas
DGI

Daniel Laffitte
Director de División Informática
DGI

USAID

Douglas Pulse
Economic Growth Advisor

John Uggen
Chief of Party
Deloitte (USAID)

WCOOMD

Sergio Mujica
Deputy Secretary General

WORLD BANK

Rajul Awasthi
Regional Coordinator, Lac

Arturo Herrera Gutierrez
Gerente de Sector

All the material contained in this publication was prepared, set up and printed at the Publications Center of the CIAT Executive Secretariat, P.O. Box 0834 - 02129, Panama, Republic of Panama.



My CIAT Services

Inter-American Center of Tax Administrations

arias

Tax administration official:

Find out about the benefits of registering in My CIAT.

When registering in My CIAT, you will:

- Receive the e-CIAT Newsletter and the Tax News Alert;
- Receive announcements of the innovations published in our Portal;
- Have access to all the information and documents available at CIAT's Web Site.

If you do not register in My CIAT, you will not have access to the restricted areas of the CIAT Portal.

Take advantage of registering in My CIAT.

Register Now!

Inter-American Center of Tax Administrations
Executive Secretariat
P.O. Box 0834-02129, Panama, Republic of Panama
E-Mail: ciat@ciat.org
Web Site: <http://www.ciat.org>
Tels.: (0507): 265-5995, 265-5996
Fax: (0507): 264-4926