

Audit Procedures

EDP AUDIT

IOTA Report for Tax Administrations



Intra-European Organisation of Tax Administrations
www.iota-tax.org

AUDIT PROCEDURES - EDP AUDIT

IOTA Report for Tax Administrations

Intra-European Organisation of Tax Administrations (IOTA)



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PREFACE

The strategic focus of most tax administrations contains reference to voluntary compliance and risk management as measures of success. One of the most effective tools for measuring these is the tax audit. Audit provides the administration with feedback on how effective or otherwise their policies are working and also provides vital statistics that can be used to gauge the tax gap.

Audit has been a constituent part of Tax Administrations' activities since time immemorial. The difference nowadays is that accounting procedures and techniques have developed out of all proportion to what was acceptable even some twenty years ago and the auditors' skills have had to adapt along with them.

With the advent of reasonably priced "off the shelf" IT based accounting software being used by the Small to Medium sized Enterprises (SMEs) along with highly complex Enterprise Resource Planning systems (ERP) being adopted by virtually all large businesses meant that tax authorities had no choice but to invest in the education of their auditors in computer assisted audit techniques and the use of audit software. The advantages that came from this general move to electronic accounting was that the auditor could now, with the right skills, examine virtually 100% of the transactions in less time than it took to examine a small, randomly selected number, using the old "tick and turn" technique. This led to more comprehensive audits whilst occupying less time at the business premises and causing less disruption to the taxpayers activities.

As part of the IOTA Area Group activities into Large Taxpayer Treatment and Audit it was decided that members should be approached to determine how their administration was addressing the issues of EDP Audit. Twenty three member administrations responded to a questionnaire on the subject and this report summarises the findings. Particular thanks for the work carried out must go to Mr. Wojech Madera from Poland who compiled the findings, as well as to the other task team members: Ms. Iveta Spickova, Czech Republic, Mr. Aubert Esquibet, France, Ms. Karina Tomaseva, Latvia, Mr. Ramunas Vaisnoras, Lithuania and Mr. Oleksiy Shmatko, Ukraine. In addition, special thanks should be extended to the European Commission's Directorate-General Taxation and Customs Union and its E-Audit Project Group for their kind permission to reproduce their E-Audit Road Map as part of the available information to IOTA members.

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1. INTRODUCTION

Tax administrations today have to operate within an ever changing environment. To help meet the demands and expectations placed on them by society and with ever tightening budgetary restrictions, many administrations are now turning to information technology to enable them to achieve the twin goals of reducing the cost of compliance for taxpayers while reducing the cost of administration of the tax system.

Due, in part, to external pressures for improved corporate governance coming from legislative changes brought about following the publication of reports such as the Sarbanes-Oxley Act¹ and the introduction of international standards such as International Financial Reporting Standards (IFRSs), taxpayers' accounting systems have developed rapidly over the last few years meaning that the majority of information is now available in electronic format.

These changes in the business environment have forced many tax administrations to review their strategic approach to the best way of improving both voluntary compliance and control within the new, leaner organisations. Many have responded to this by replacing their traditional paper-based audit approach to taxpayers systems with systems-based methodologies targeted towards risk and the use of computer assisted audit techniques to more effectively address those issues and to keep pace with the new systems that auditors have to contend with.

Companies are also demanding more efficient services and better communications from tax administrations (TA's). These issues have been addressed by tax administrations when modifying and streamlining their information exchange with the clients by the introduction of new web-based applications and the use of contact centres. It has also meant that tax administrations have had to critically review their approach to audit so as to cause as little disruption to taxpayers business activities as possible. One way is by the use of e-audit techniques to quickly gather process and analyse taxpayer data thus reducing the time spent at the trader's premises.

This Report examines the way tax administrations have approached the issues surrounding the use of e-audit in the taxpayer compliance and looks to identify common trends and procedures throughout the IOTA Membership, whilst making recommendations towards best practice.

As part of the analysis process IOTA Members were invited to answer a questionnaire of 14 questions on how they perceived the role of e-audit as part of their compliance strategy. 23 tax administrations took part in the survey and the following is a summary of those questions and answers.

¹ The Sarbanes-Oxley Act of 2002 (Pub.L. 107-204, 116 Stat. 745, enacted July 30, 2002), also known as the 'Public Company Accounting Reform and Investor Protection Act' (in the Senate) and 'Corporate and Auditing Accountability and Responsibility Act' (in the House) and commonly called Sarbanes-Oxley, Sarbox or SOX, is a United States federal law enacted on July 30, 2002, which set new or enhanced standards for all U.S. public company boards, management and public accounting firms. (http://en.wikipedia.org/wiki/Sarbanes%E2%80%93Oxley_Act)

2. DEFINITION OF E-AUDIT

2.1. E-Audit Road Map

The majority of tax administrations have adopted the “e-audit” definition below which was taken from the [E-audit Road Map](#) developed by the European Commission Directorate-General Taxation and Customs Union.

“The Verification/Checking Of Accounting Transactions [And Their Sources/Origins] Processed In An Electronic Environment, Using Analysis, Evaluation And Testing Audit Methods, Assisted By Computerised Tools.”

E-audit has developed within the various tax administrations throughout Europe over an extended period of time, resulting in different solutions being found to similar problems. As a consequence several standards have evolved. However, collaboration between European Union Member States has meant that a common approach to many of the issues has been found as reflected in the E-Audit Road Map. Considerable interest has already been shown by a number of other countries in adopting these standards.

Currently, many countries apply these standards to varying degrees, but several components have achieved common usage. These include:

- Documents and records that were created in electronic format should be stored in the same form (manner). The person responsible is obliged to hold the data in electronic form and to ensure that the data remains accessible in its original format.
- Data should be retained for a minimum period of 5-6 years and protected from uncontrolled change.

Considerable amounts of data are now available to the e-auditor and it is important that they are able to uplift the information they require in a suitable format. In earlier years the variety of disk and tape formats meant that administrations had to invest heavily in technology to be able to cater for the wide range of products that were used and the comparatively small amounts of data that could be easily transferred. Nowadays the most common practice identified when confronted with applications designed for the Small to Medium Enterprises (SMEs) is to transfer the entire accounting system on to bulk media such as CDs, DVDs, USB flash drives, removable hard drives, etc.

A less common approach but one which must be adopted when dealing with large Enterprise Resource Planning (ERP) systems such as SAP, JD Edwards, Baan or Microsoft Dynamics ERP, is to download the data directly from the financial and accounting system (including the collection of the data online) or indirectly by the use of an audit file installed on the system of the company.

The practice used least is to transfer data electronically by email or file transfer (FTP) due predominantly to security issues but also to restrictions placed by some

Internet service providers on data volumes. However, data security over the Internet can be solved, e.g., the solutions to Internet banking.

European Union Member States have devised a number of standards as to the responsibilities of the taxpayer in relation to e-audit, many of which are now supported by legislation, including:

- **Displaying the data in electronic format when required by an auditor:** transaction analysis does not always require a hard copy to be produced and seeing an event “on-screen” may assist in the understanding of how a system operates;
- **Cooperating in collection of the data:** some of the more complex ERP systems may require the assistance of the taxpayers’ IT department or service provider to help identify and extract the relevant information from the system;
- **Providing access to any data stored outside the company:** when an organisation employs a third party to manage their systems or they have off-site storage of archived data it may again be necessary to involve them in identifying and extracting data for audit;
- **Maintaining the data in a manner that enables efficient audit:** if a taxpayer installs a new computer or accounting system, then they should also ensure that both the data and the operating / accounting system software is archived so that, if requested, they can restore the earlier systems and gain access to the information required by the auditor;
- **Explanation as to how the financial and accounting system works:** if the tax administration has adopted a systems-based approach to audit, then the auditor will need to be able to document the processes within the accounting system. To do this they will require access to either software specialists who designed or configured the system or to members of the taxpayer’s staff who fully understand how the application functions from a user’s perspective.

2.2. E-Audit vs EDP Audit

Of those tax administrations that answered the question as to whether they used the same definition for e-audit and EDP audit, all tax administrations identified e-audit and EDP audit as having the same meaning apart from Switzerland and Denmark who offered the following alternative definitions.

Switzerland

E-audit - as defined by the E-Audit Road Map.

EDP auditor - A person who performs an EDP audit within an organisation. Such individuals analyse the existing systems and procedures using audit software that samples databases and generates confirmation letters.

Denmark

E-audit - is used as a generic term to cover a “three-pillar” structure consisting of:

- **EDP audit:** covering the tasks which include the use of traditional audit software such as IDEA and ACL and the automation of audit actions by the writing of guidelines regarding data capture and the creation of scripts, etc.;

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- **E-commerce:** using the EU Fiscalis definition of “an economic transaction using an electronic network - usually but not only the Internet, for orders, payments, deliveries of products or services, or a combination of these”. Use of tools such as ECeYes, Copernic or Xenon in the audit process which is divided into three logical stages:

1. Monitoring the Internet with respect to new trends, new business models, etc., that are likely to be considered as a taxable activity;
2. Search, find and identify e-commerce traders on the Internet, based on an audit profile generated via monitoring or other audit and tax information; examine the Internet and try to find e-commerce traders according to the audit profiles;
3. Audit of e-commerce traders - once it has been decided to audit an e-commerce trader the audit process is more or less the same as the audit process used toward all other traders, although gathering information, transactions and evidence from e-commerce environments where data can be split into several separate worldwide virtual platforms can be very challenging in cases where a company is not willing to cooperate.

- **Digital Forensics:** covers tasks which include the use of tools like EnCase for mirroring data (hard drives, USB flash drives, etc.) and ILook for analyses of the mirrored data.

3. ORGANISATION OF E-AUDIT

In an attempt to determine the extent to which e-audit was used, the participating tax administrations were asked to identify the areas within their administrations where the technology was applied.

3.1. Coverage

As can be seen from the Chart 1 below, the majority of responding tax administrations apply e-audit across all regimes and areas of risk for which they have responsibility. However, the ways in which e-audit is applied differ, dependant upon the regime and the type of risks encountered.

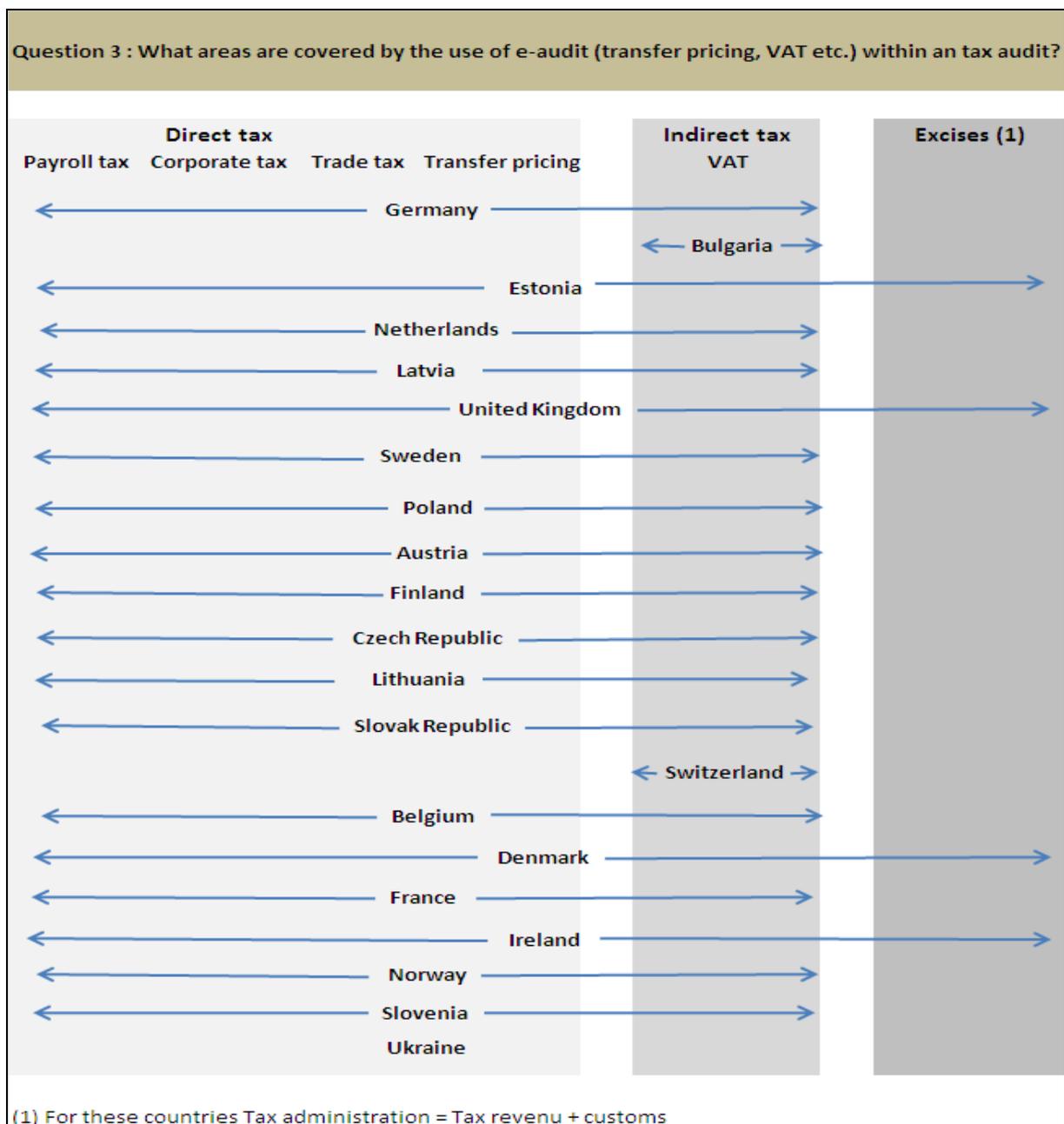


Chart 1. Use of E-Audit within tax administrations NB: Germany and Sweden also include Excise

Certain revenues lend themselves better to substantive analysis, such as VAT, whereas others, such as corporation tax are more compliance-based. These varied approaches require different skill-sets from the auditor as they will have to understand the revenue implications of the regime they are examining in order to be able to identify concerns or issues.

3.2. E-Audit Process

Apart from Bulgaria and Croatia, who have not yet implemented e-audit, there was an interesting variety of approaches that have been adopted by IOTA Members, each addressing the problems and benefits of e-audit from a slightly different angle. Below is a selection of responses that highlight these differences.

In the Netherlands they have a multi-tier approach to e-audit. They expect all auditors to be able to use e-audit software tools after having received the appropriate training. EDP specialists who have university degrees in EDP and audit will assist auditors if they have problems with more complex systems. One audit specialist may be expected to support up to 20 "normal" auditors.

The United Kingdom have specialised EDP auditors who have the training to be able to carry out detailed system analysis on complex systems and who use the more advanced e-audit tools to analyse traders data. These specialists were once members of a separate Computer Audit Service, but following recent reorganisation within the administration they are now individually assigned to large taxpayer control teams who provide a single point of contact for the taxpayer. Non-specialist auditors also use e-tools that have been developed "in-house" for use by staff with the need for very little training. These tools are designed to assist auditors in analysing and auditing.

The use of the EDP auditor in Sweden differs slightly. They have specialised EDP auditors whose responsibility is to perform system mapping, convert the data and prepare data files for analysis. However, the actual analysis is performed by the auditors conducting the audit. The EDP auditors do not work in the central office but are integrated in to the different large traders and SMEs units.

In Ireland they have a central Computer Audit Support Unit which is part of their Large Cases Division who provides support and training to other staff dealing with e-audit of SMEs in each of their four operational regions. This team has been in existence for a number of years now and has built up a range of skills and approaches to deal with some of the unique issues they have experienced.

In France tax audits are divided in to three levels:

- Small - dealt with at department level;
- Middle - handled by regional staff;
- High - for large taxpayers.

At each level an auditor has the option to use e-audit tools. At the highest level are e-audit experts called "BVCI" who concentrate their attention on only the largest of traders.

Belgium has two administrations that are responsible for e-audit:

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- The first is the administration that deals with VAT and income tax audits; it consists of several taxation units, each of which has a number of e-auditors;
- The second is the administration responsible for tax fraud cases which uses e-audit forensic tools on an ad-hoc basis.

In Denmark tasks covered by the term e-audit are divided into three pillars:

- EDP audit;
- Activities related to e-commerce audit;
- IT and digital forensics.

The variety and complexity of e-audit tools and techniques is highlighted by the IOTA tax administrations' decision as to which tools to buy, which areas of audit to specialise in (ERP systems, off-the-shelf accounting packages, forensic analysis, etc.) and how to divide the technical resource between the various tax regimes / administrations.

To obtain a more detailed analysis of the methodologies, strategies, procedures and tools employed would require a more in-depth enquiry than has so far been conducted. However, a recent Fiscalis study on audit automation (see Appendix B for the executive summary) goes into considerable detail on the subject of audit automation.

3.3. SMEs and Large Taxpayers

Dependant upon the structure of the various tax administrations and the relevant skills of their staff, audits can be undertaken on both direct and indirect tax regimes, plus assistance may be offered in cases of identified fraud where computer forensic skills could be needed. The majority of responses suggested that tax administrations do not differentiate between the auditing of SMEs and large taxpayers. However, a small number indicated that their approach to the two sectors differed in the following ways.

Finland

The Large Taxpayer's Office takes care of the large taxpayers and e-audit is always used. The SMEs are handled by the regional tax offices and e-audit is used when needed.

United Kingdom

Two-tier structure of audit is used:

- A Large Business Service dealing with the largest of taxpayers, which are defined by a combination of turnover and assets. A specialised e-auditor will be assigned to the control team responsible for total business control.
- Local Compliance who has responsibility for large taxpayers that fall outside of the above criteria, and SMEs.

Auditors with a variety of skills will use a mixture of the most complex audit tools to the simple, automated data analysis or spreadsheet tools dependant upon the identified risk or complexity of the trader.

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Austria

Identified that the prime difference between large taxpayers and SMEs was in time allocated to and tasks performed during the audit.

Switzerland

Small enterprises are audited by the Division of Internal Imposition, whereas large taxpayers are checked by external e-audit.

Estonia

E-audit is used mainly for the audit of large taxpayers.

It is recognised that e-audit techniques, tools and procedures are adopted more frequently for auditing large and complex taxpayers where the additional resource and skills are justified.

4. LEGAL FRAMEWORK

4.1. General Regulations

In general terms, the legal framework for e-audit is the same as the normal "paper" audit. The tax administrations identified that they have the right to request data in electronic format if the information was held electronically and that all taxpayers had a duty to provide the data in electronic format if required. This obligation is defined in the general tax acts of each country.

Time limits set for taxpayers to retain data in an electronic format are frequently the same as for information provided in hard copy and is dependant upon the tax regime involved.

A more formal structure to cater for e-audit appeared to exist within the VAT tax legislation.

The United Kingdom has legislation that allows an auditor access to the data used in connection with the production of tax returns, and also to check the operation of the relevant computer system.

Sweden and Germany have no right to retain any of the taxpayers' electronic data once an audit is completed.

In Lithuania and Germany, tax auditors have a duty of confidentiality to any information that is provided to them. This obligation is probably similar in all countries although not specifically referred to. Taxpayers are entitled to compensation for any damages caused by an auditor releasing their information to unauthorised persons.

In some countries like Finland, legislation makes it possible for tax administrations to get remote access online to companies' accounting systems or storage of e-invoicing archives using, for example, the Internet, SSL² or VPN³. This method of accessing information is used in cases where companies already use and offer remote access to their suppliers or in smaller companies where they have outsourced their bookkeeping or accounting to separate bookkeeping agencies that use or offer services over the Internet. All normal audit procedures are still available for use during such audits as well as the remote access which provides an extra element that may make the audit more effective or efficient.

4.2. Provision of Data

Legislation between IOTA Member countries varies tremendously. Both extremes are encountered, from having no specific rights to request electronic information to actually stipulating the format and frequency information should be provided in.

From the analysis of the information provided, it is reasonable to conclude that if a taxpayer holds data electronically, the majority of tax administrations have the

² Secure Sockets Layer, a protocol developed by Netscape for transmitting private documents via the Internet.

³ Short for virtual private network, a network that is constructed by using public wires to connect nodes.

right to request that information in an electronic format. In some countries that right is specified in law whilst in others they only have general provisions to cover the situation and there are a small number of countries that have no such provisions at all.

Examples of how various countries approach the situation can be seen below.

Croatia

The General Tax Act gives only general provisions, indicating that the taxpayer is “obliged to provide to the tax administration data concerning the taxation.”

Germany

Part of the Tax Code stipulates that the taxpayer has to provide the auditor access to the stored data or, process the data as required by the auditor or, give the data to the auditor. The auditor has the right to choose which option they wish to use.

Estonia

An obligation to submit accounting data electronically and to explain the accounting system to the auditor exists under the General Tax Act. The Accounting Law specifies that any electronic data must also be retained electronically and must remain legible during the period of retention.

4.3. File Formats

The problems of data transfer today are much simplified compared to the issues encountered in earlier years of electronic data management. Many software products will now allow data to be exported from the accounting software, based on a simple table selection process which will then process the data into either a database or spreadsheet format for the auditor to analyse independently. Alternatively, a number of systems have a built-in enquiry / query function to allow ad-hoc data analysis to be performed by the auditor without the need to download information onto a new platform. As the majority of accounting applications software is now based around a relational database; these queries are often created using the Structured Query Language (SQL) originally developed by the IBM.

Austria, Bulgaria and France have legal definitions of file formats for e-audit. **The Netherlands** have an audit file (“exchange connection”) embedded within a number of commercial software packages that is used. Some countries, including **Slovenia**, use the Standard Audit File-Tax (SAF-T) concept which was devised by the OECD. The SAF-T was developed to provide tax administrations with the opportunity to adopt a “standard” audit file layout to be used by producers of accounting software. In the words of the OECD, “SAF-T is a file containing reliable accounting data exported from an original accounting system, for a specific time period, easily readable by virtue of its standardisation of layout and format, and one that is extensible according to need.”⁴ The Accounting Board in the Ministry of Trade in **Finland** has issued guidelines on storage and restoration of electronically stored data, the use of IT and audit, but no specific rules on file formats. Any

⁴ OECD Forum on Tax Administration: Guidance for the Standard Audit File - Tax Version 2.0

electronic format which can be restored in visible and generally readable form is acceptable.

5. SYSTEM FLOWCHARTING AND INTERNAL CONTROL EVALUATION

One of the ways of determining the risk factors affecting the reliability of an accounting system or package when used by a taxpayer is to examine the internal controls applied by both the company and the software to see where weaknesses exist and what potential revenue risks could occur.

To be able to conduct an effective review of any system and its internal controls it is necessary for the auditor to gain a detailed understanding of the application, its processing sequence and data management functions. It is also essential that they are able to document their findings in an easily understood format.

From the information provided, 13 out of the 23 tax administrations use flowcharting and internal control (IC) evaluation during the audit process of large taxpayers. Three tax administrations flowchart the systems but rarely evaluate the IC's and Switzerland documents the individual systems processes rather than the internal controls.

In flowcharting the system the auditor needs the help of an IT specialist or applications developer to assist them in following the system processes through from data capture, identifying the internal controls and validations, processing sequence and timing, to the summarisation and reporting of the organisations tax liabilities. One way to approach this problem and one which has been adopted by a number of countries is to involve the software house that developed the software originally so as to avoid repetition at each of their users, or possible misunderstandings due to lack of understanding by the applications operators.

Many of the larger organisations now employ Enterprise Resource Planning (ERP) systems such as SAP or Baan which are highly complex systems often employing their own programming language (ABAP in the case of SAP). An auditor requires specialist skills to be able to identify, analyse and to follow the processes and configurable tables used to calculate the enterprises tax liabilities in these systems.

Once the system has been documented / flowcharted, it can then be used by the auditor to compare against the operational systems and procedures to see how, in practice, any imbedded controls and validations are used by the organisation to ensure that the information presented to the tax authorities is complete, accurate and timely.

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Tax Administrations	Yes	No	Comments
Austria	Y		If considered useful.
Belgium	Y		The system is flowcharted. Internal controls are seldom evaluated.
Bulgaria		N	
Croatia		N	
Czech Republic		N	
Denmark	Y		As part of the audit flowcharts or similar methods are used to obtain information about the traders systems or subsystems.
Estonia		N	
Finland	Y		The general ledger and its subsystems are flowcharted and internal controls are discussed with the taxpayers' personnel. No deep evaluation of internal controls is carried out.
France	Y		Mainly for larger traders.
Germany		N	Usually no. If deemed necessary it can be done.
Ireland	Y		As and when required.
Latvia		N	
Lithuania		N	
Netherlands	Y		Separate "pre-planning" audits are used to investigate the internal controls for large taxpayers.
Norway	Y		Defined as part of the audit process but no details as to how often it is carried out.
Poland	Y		
Slovak Republic	Y		E-audit specialists examine the accounting system mapping flowcharts and internal controls of systems according to the e-audit needs.
Slovenia		N	
Sweden	Y		The extent of the system mapping and internal control evaluation is dependant upon the audit objectives and the importance of the system / subsystem.
Switzerland	Y		A process description is used rather than internal controls.
Ukraine		N	
United Kingdom	Y		Usually carried out for only the largest of businesses.

Table 1. Tax administrations auditing the systems and evaluating internal controls in the audited companies.

6. COOPERATION WITH ACCOUNTING SOFTWARE PRODUCERS

It can be argued that by the creation of an informal partnership between the tax authority and the software providers, both parties benefit.

The tax authority gains the benefit of having access to the software providers analysts or programmers so that they can gain an in-depth understanding of how the package works and thus identify the relative strengths and weaknesses of the software along with the processing sequences and internal controls that are applied; which they can then advise their auditors to be aware of when auditing traders using that software.

The software house gains the benefit of having free access to tax officials who can advise them of the correct procedures and complex sequences of events to follow in their programming. They also benefit in being able to improve their product based on expert evaluation of technical tax issues that otherwise they would encounter each time one of their clients was audited.

15 responding tax administrations stated that they were cooperating to a greater or lesser extent with accounting software producers. The extent of cooperation varies amongst countries and is based purely on the voluntary cooperation of the software house.

Sweden has issued a standard format definition SIE4 that provides the tax administration with a simple, direct export / import into their analysis tool SESAM.

The United Kingdom supports the Standard Accounting Package. Over the years, a number of more prominent suppliers of "off-the-shelf" accounting software have emerged in the UK. These include companies such as Sage and Pegasus. Auditors have liaised with the software developers to produce systems descriptions and audit guides. These documents, which are commercial in confidence and for use by authorised staff only, highlights any particular strengths or weaknesses of the software and contains information on which files are required for audit purposes and how to extract, download or interrogate the data. This process is beneficial to both the software developers and the tax administration as it ensures that time spent at taxpayers who use one of these software packages is much reduced and also allows tax administration auditors access to systems analysts and programmers who developed the software and who can explain the system in far more detail than the end user. This relationship with the developers also includes the early notification of forthcoming legislative items that may affect the operation of their software, in order to allow time for the necessary changes to be made. These data extraction routines have been automated to allow less experienced staff to extract data and perform tests to check for generic risks within the regime on standard accounting package software in automated version to simplify their tasks.

Germany

Cooperation with accounting software producers is ensured only to a certain level. It depends on the problem to be solved."

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Denmark has started to cooperate with accounting software developers but never plans to “rubber stamp” any software.

Belgium

Meetings with the accounting software producers are organised. These meetings have only the purpose of obtaining information about the software.

The Netherlands

There are meetings and discussions with the organisation of software producers. They can ask for an investigation on new developed software. But there is no legal obligation.

France

Indirect cooperation is organised. The French tax administration works with a National Office of Standardisation in order to software producers be in compliance with tax rules and codes. For instance, accounting software can not remove a legitimate entry.

Ukraine

The tax administration cooperates with accounting software producers to provide electronic reports.

7. E-AUDIT SOFTWARE

There is an ever increasing range of audit tools and products being developed and made available to taxpayers, accountancy firms and tax authorities. In analysing the use of these products it was found that one product, ACL, is used by more than 50% of the countries who responded, followed by IDEA.

Tax Administrations	ACL	IDEA	Sesam	Developed internally	Comments
Austria	Y				
Belgium	Y				
Bulgaria				Y	Oracle is used developed internally.
Croatia					No tool
Czech Republic		Y			
Denmark	Y	Y		Y	Xenon EnCase and internal product under development.
Estonia	Y		Y		
Finland	Y		Y		Monarch.
France	Y				C++, MySQL, Perl language.
Germany		Y			
Ireland		Y			
Latvia			Y		
Lithuania			Y		
Netherlands	Y			Y	Clair and Scout developed internally.
Norway	Y				
Poland	Y				
Slovak Republic		Y			
Slovenia	Y				
Sweden	Y		Y		
Switzerland				Y	Inspecta.
Ukraine				Y	Self-developed Oracle-based software.
United Kingdom	Y	Y		Y	Cedat and SpACE developed internally.
Total	12	6	5	5	ACL is used by more than 50% of the countries.

Table 2. Use of e-audit software in IOTA Member tax administrations..

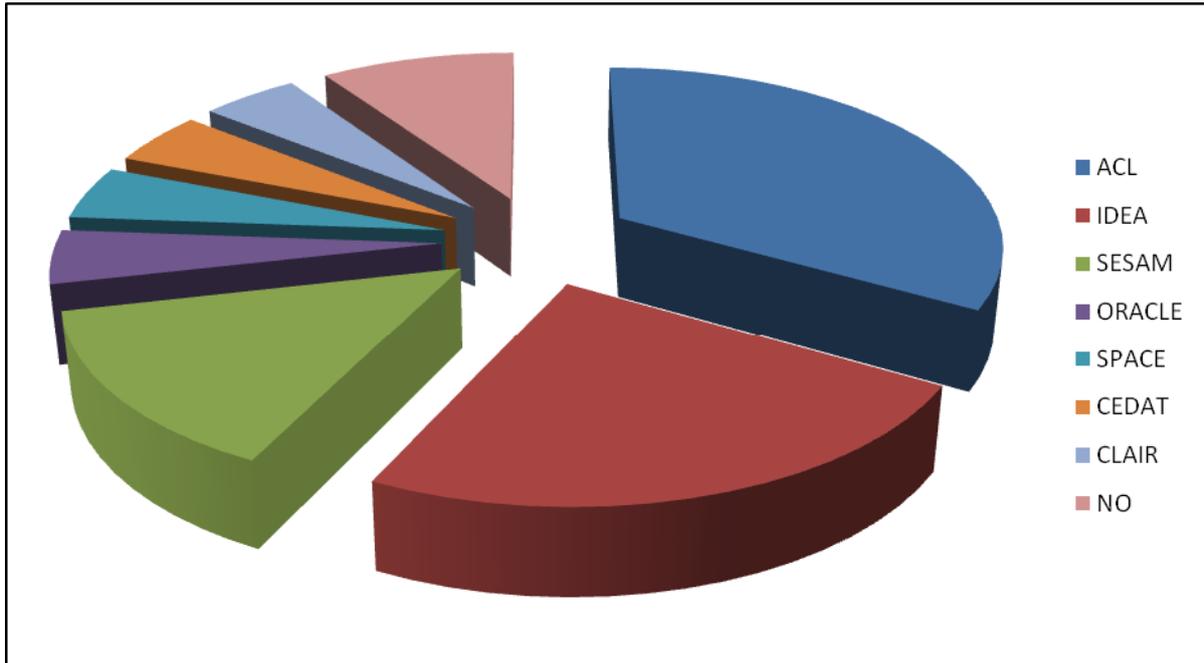


Chart 2. Use of e-audit software in IOTA Member tax administrations

As can be seen from Table 1 and Chart 2 a number of tax administrations have also developed their own programmes and tools, amongst which are Clair and Scout in Netherlands, FIAP in Denmark and Cedat and SpACE from the United Kingdom.

Further information on commercial tools can be acquired over the Internet, whilst some additional details of those developed in-house are reproduced below.

The Netherlands

Clair (financial) uses a predefined format known as the Dutch Audit File (financial) (the OECD SAFT is based on the Dutch Audit File). If the financial package or company or taxpayer uses the predefined audit file, no additional information is needed. If the data file concerned is not a predefined audit file then a regular tax auditor will need to use Scout.

Clair stands for a 'clear look at information retrieved'. It is an application developed by the Dutch tax administration originally intended to analyse predefined general ledger information. It uses the Dutch Standard Audit File in a TXT or XML format. For the last 6 years they have also had the ability to use Clair for analysing labour tax / wage tax declarations, using the Standard Audit File for Wages.

Clair is easy to learn. It takes at about one day to get a basic understanding of the features available. Amongst the standard options are the overview of balance sheet and annual results, information regarding debtors and creditors, journal and journal entries. Additional selections can be made on different columns available in the standard audit file using options like date from and date to, numbers smaller than or greater than, text strings containing elements of words, etc. Many standard analyses are built in including an overview of journal entries on weekdays and a monthly pivot table on the general ledger level.

Clair also has the option to compare balance sheets and profit sheets from different periods and / or different years. It comes with a drill down option and the ability to export the results of any analysis to Excel or a txt file, including the formulae used to create the analysis.

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In the past many of the software developers for the small and medium enterprises have chosen to provide the option within their accounting software to create a standard audit file.

Clair uses a Microsoft Access engine and works on every Windows platform. At this point in time the engine used has been reassessed.

Scout is more or less an offspring of Clair. It has the same selection options as Clair. It is also easy to learn. Scout was created to handle information in any format other than the standard audit file. It can import files in a dbase, txt or Access format. The data to import is often pre-handled by the EDP audit specialist. Scout has the ability to create a pivot table and it also uses a Microsoft Access engine.

United Kingdom

Spreadsheet Audit for Customs & Excise (SpACE) is a non-intrusive audit tool that uses a variety of pattern matching techniques to detect incorrect use of formulae, characters instead of numbers breaks in ranges and a variety of other standard spreadsheet issues.

Switzerland

Inspecta software is based on MS Office.

In most cases the taxpayer provides the data in Excel, XML, Text (word) or PDF formats. Any auditor can use Inspecta after appropriate training. Output from the audit tool is an audit report, analysis of information and economic branch.

Denmark

Denmark is currently developing a tool primarily for use in the area of IT forensics and will mainly be used on electronic data obtained via disk mirroring. However, it is anticipated that it will be used on all kind of electronic data.

The software is designed to create a searchable index of different selected file types, such as text, Word, Excel, HTML, email, etc. It is intended to be easy to use and has a graphical interface and provides the option to export selected files into a separate workspace file.

8. ACCESS TO DATA FROM INTERNAL AUDITS OF TAXPAYERS OR AUDITS OF CHARTERED ACCOUNTANTS

It is often overlooked, but the information available from a taxpayers own internal audit team can be of considerable benefit to the tax auditor. Much of the information required by the tax administration will have been reviewed for other purposes by the team and reports highlighting errors in expense claims, incorrect use of account codes and personal items put through the VAT account, for example, often find their way into a report to the financial director. In larger organisations, automatic controls are embedded in the accounting software to pick up these problems and report them to the audit team. These “probes” are there to protect the taxpayer from both internal and external threat and are used extensively by internal systems auditors to provide assurance.

Many international firms of accountants use dedicated software to assist them in preparing their clients tax returns. These applications use a series of logic statements and questions to determine liability against previously input parameters, data, tax law or agreed allowances, building up into a final return.

Only three IOTA Member tax administrations have access to taxpayers internal audit data in digital format - **the Netherlands, UK and Ireland**. In the case of **the Netherlands**, auditors only have access under specific circumstances to the audit files of chartered accountants.

The Netherlands

Access to digital data of internal audits is available as it is a part of the administration of the taxpayer. There is an arrangement with the chartered accountants of private companies to make use of their audit files, but only in restricted circumstances. It is necessary to ask for the information from the taxpayer in the first place. Only when the taxpayer can not provide the information there is a reason to go to the chartered accountant. The chartered accountants will send a bill to the taxpayer for their services. The data is connected to the audit file in the electronic archiving tool.

The United Kingdom

There is legislation that specifies that if data is held by a third party then the tax administration has the same powers as if the data was held by the business itself, i.e., the third party must produce information and documents and allow the auditor to copy data, etc. However, most data is supplied directly by the business.

Ireland

Under Section 905 TCA and Section 18 VATA 1972 the records which may be inspected, as well as including records which are required to be kept, also include any records, etc., that relate to the business carried on, e.g., board minutes, correspondence between the statutory or external auditor and the company.

9. E-AUDIT INTERNAL GUIDANCE

All tax administrations that carry out e-audit have internal guidance except for Austria, Bulgaria, Croatia and Ukraine who is considering implementing e-audit and associated procedures.

Tax Administrations	Yes	No	Comments
Austria		N	
Belgium	Y		All the tax auditors using ACL have the opportunity to follow ACL training. Further information is provided via the Intranet (legislation information about accounting software, guidelines, templates, etc.). The management requires that a minimum number of e-audits are carried out by the tax units.
Bulgaria		N	
Croatia		N	
Czech Republic	Y		It describes e-audit procedures (how to ask data, which formats are the most suitable, how to manage with the data, etc.)
Denmark	Y		Guidelines for the export of data from different accounting systems, guidelines for the audit process, tips and tricks, security, how the tools is are used, etc. They are shared via internal websites and newsletters.
Estonia	Y		A very general one.
Finland	Y		Internal and external guidance for e-audits is available. In internal guidance it is described how to make a good e-audit step by step (following nearly the SCAT 29-document or EU's E-Audit Road Map) and in the external guidance it is described to the companies (taxpayers) what is e-audit and its benefits and what is expected from them to do before and during e-audit (including description of audit files).
France	Y		The main lines of the internal guidance are resumed in the E-Audit Road Map. The internal guidance for e-audit is based on nine processes - stages: 1) pre-planning; 2) system mapping; 3) evaluation of system; 4) planning/developing test strategy; 5) data capture (and conversion); 6) validation; 7) execute agreed test strategy; 8) report on EDP audit; 9) future action.
Germany	Y		There is a circular about the rights and

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			obligations of the taxpayer. There are training courses for the use of IDEA software.
Ireland	Y		Guidance is incorporated in the e-audit training. In addition e-auditors are subject to the same legislative provisions code of practice obligations, charter of rights obligations and operational instructions as other auditors.
Latvia	Y		State Revenue Service has internal guidance for e-audits. In internal guidance are stated rights and obligations of tax auditors, and how to use and work with e-audit software.
Lithuania	Y		There are e-audit data receiving and safekeeping rules where it is stated what kind of procedures and steps it is necessary to carry out during e-audit. Besides internal Sesam user guides are also available Sesam documentation provided by Sesam software developer.
Netherlands	Y		The internal guidance is a part of the education of the auditors. It is not so special because it describes that you should investigate the "real world" of the taxpayer in the first place. After that you have an idea what kind of information the administration should provide with that type of company. In the pre-planning part of the audit you investigate the internal controls and the automation. The experiences with these two steps give the direction of the audit and the amount of work. The first part is the completeness of all the transactions and after that the correctness of the invoices with e-audit. The audit of the invoices itself is common with paperwork.
Norway	Y		The auditors have been given instructions in how to conduct e-audits in connection with software training (ACL and Access).
Poland	Y		Training materials.
Slovak Republic	Y		Guidance on use of e-audit in general. Guidance on using IDEA on income tax e-audit. Guidance on using IDEA for VAT.
Slovenia	Y		Manuals are available for ACL (9.1.version) for audit procedures in VAT and for tax inspection of general ledgers using ACL, which define the standard procedures and standard verifications used whilst auditing with ACL. The manuals also include sample

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			files, where tax inspectors can improve their knowledge themselves.
Sweden	Y		The audit manual includes a chapter regarding e-audit. The chapter is about 10 pages and includes the parts on e-audit in general, legal obligations regarding e-audit, e-audit working methods, flowcharting techniques, audit of data files (from the companies financial system).
Switzerland	Y		Refresher courses "Inspecta" (self-developed audit tool), SAP manual, control process manual.
Ukraine		N	
United Kingdom	Y		However this is presently being rewritten.

Table 3. Availability of internal guidance in IOTA tax administrations..

10. LARGE TAXPAYER E -AUDIT

Very few large taxpayers now have manual accounts. Over a period of time the principal of Business Process Reengineering (BPR) has ensured that all aspects of the larger organisations have been brought together under an Enterprise Resource Planning (ERP) system that collectively manages the ordering, stock control, manufacture, sales, logistics and salaries functions of an organisation and can handle transactions in multiple currencies - an essential when dealing worldwide. ERP systems are infinitely configurable so as to be able to meet the needs of the most highly complex of organisations.

To be able to determine if the correct tax rate has been applied to a transaction and that it has been correctly posted to the relevant nominal ledger account; it is necessary for the auditor to have confidence that the system is accessing the correct information from the correct place, which is not as simple as it sounds from an ERP platform. To gain the level of assurance necessary to effectively audit a traders tax affairs the auditor must have sufficient understanding of the software in use to be able to identify and test its strengths and weaknesses. This can only be done by e-audit.

Tax Administrations	Percentage	Comments
Austria		E-audit is used in most cases but not necessarily in depth. It depends on the auditor.
Belgium		No figures are available, as an official definition of large taxpayers has been defined only since 1 January 2010.
Bulgaria		For VAT it is obligatory to use Oracle software.
Czech Republic		An evaluation of the use of e-audit was to be carried out in 2007.
Denmark		The majority of large trader audits would involve e-audit.
Estonia	100	If the taxpayer can provide the auditor with electronic data the audits are carried out electronically in almost all cases.
Finland	95	In medium companies 25% and in small companies 5%.
France	38	Of 1300 audits carried out, 500 were e-audits.
Germany	100	E-audit should be used in every audit The processing (search sorting) is carried out using IDEA or functions of the software the taxpayer uses.
Ireland		Large taxpayers are selected for audit / e-audit on the basis of risk analysis. E-audit will be used if the risk analysis suggests that such an approach is required.
Latvia	15	In 2007 1833 audits were performed, of which

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		60 were to large taxpayers and e-audit was used in 15% of those cases.
Lithuania	62.5	62.5% of the audits of large taxpayers have been carried out using Sesam e-audit software during the period from the 1 st quarter of 2007 to the third quarter of 200. 4% of all the audits have been carried out using Sesam e-audit software during the same period.
Netherlands	95	The number of large taxpayers is only 2% of all the taxpayers. In approximately 10% of all the audits (60,000) e-audit is used. There are a lot of small and/or partial audits. It is not possible or effective to use e-audit in these cases.
Norway		There is no overview of how often e-audits are conducted at large taxpayers.
Poland	90	Small - 20%, medium - 50%
Slovak Republic	55	Not every tax audit of the large taxpayer is made using e-audit because of the shortage of IDEA software licences. Up to 30 September 2010 55% of all audits on large taxpayers were e-audits.
Slovenia	35	30-40% of all large taxpayers are audited with ACL.
Sweden	95	In the small and medium companies the corresponding figure is about 80%.
Switzerland	100	Generally e-audit is used in all computer supported accountings.
Ukraine		E-audit procedures are used only in criminal prosecution procedures (where the hardware, software and books are removed from the taxpayer's office).
United Kingdom		E-audit is used when necessary. There are no comparative percentages.

Table 4. Percentage of e-audits from all audits of large taxpayers in IOTA tax administrations.

APPENDIX A

List of IOTA Member tax administrations who responded on survey:

- Austria;
- Belgium;
- Bulgaria;
- Croatia;
- Czech Republic;
- Denmark;
- Estonia;
- Finland;
- France;
- Germany;
- Ireland;
- Latvia;
- Lithuania;
- Netherlands;
- Norway;
- Poland;
- Slovak Republic;
- Slovenia;
- Sweden;
- Switzerland;
- Ukraine;
- United Kingdom.

APPENDIX B

Fiscalis 2007 Programme E-Audit Project Group

Audit Automation Guidance Paper 2008 Update Includes the latest developments in automated testing

Executive Summary

Background

This is an executive summary of the work carried out by the Audit Automation Task Team set up under the auspices of the E-Audit Project Group and established as part of the Fiscalis 2007 Programme. It provides a broad overview of the purpose behind the tasks, work done and the way forward. The more detailed information is found in the main section of the report and the appendices.

Work Done

The report is the result of a successful collaboration between the following Member States:

Austria, Netherlands, Germany and the UK.

And updated by Finland, Italy, Poland, Portugal and the UK.

The Team met once during 2007 and once in 2008 to update and gather information and develop guidelines on the implementation of audit automation solutions. The Task Team issued two questionnaires, one to all Member States asking for comments and suggestions on the OECD testing paper. Plus the level of adoption of the Standard Audit File. The second one was sent to software developers asking them what their plans were for the adoption of the SAF-T and the building of an automated testing tool based on the OECD's list of tests.

The report covers the following main areas:

- Legal framework;
- Audit automation - the process and implementation;
- Diagrammatic description of the process (Annex 1);
- Test specification (Annex 2);
- Description of automated audit tools (Annex 3);
- Developing an automated audit tool (Annex 4);
- Software house plans for the development of an automated testing tool (Annex 5);
- OECD's list of tests (Annex 6).

Conclusions and Recommendations

The formation of the Audit Automation Task Team has proved to be an effective and efficient way of gathering contributions from Member States and sharing the knowledge with tax administration throughout the EU. The Task Team has

distributed the OECD's Guidance on Test Procedures for Tax Audit Assurance. This should help prevent duplication of effort within the EU.

The following recommendations acknowledge the need to maintain and advance our knowledge in this area:

- It is envisaged that working in cooperation with the software companies such as Idea, ACL and Sesam that an automated testing tool based on the OECD's list of tests will be developed;
- Due to the ongoing work relating to the Standard Audit File for Tax, Payroll and Inventory additional tests listed at Annex 2 should be extended to cover other tax regimes;
- An important emerging issue is the security of data and the guidance relating to the secure transmission and storage of taxpayers data. Should this be included in the e-Audit Road Map?

Action Required

The Task Team activity has enabled experts to compile technical information for distribution and sharing amongst all Member States. It is important that the e-auditors in each Member State have the opportunity to comment on the content, the accessibility of the material provided and how useful it is to them in both policy and operational areas.

This should be published on the new eAudit European forum so that it can get the widest circulation.

The Steering Group to consider investigating issues relating to the security of data (transmission, access and storage).