RISK MANAGEMENT GUIDE

FOR TAX ADMINISTRATIONS

Fiscalis Risk Analysis Project Group

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INDEX

PART 1 – General Introduction

1. **INTRODUCING RISK MANAGEMENT**

Risk Management is part of our subconscious behaviour which guides us in making the best possible choices each time we have to make a decision. Usually, this can be seen as a human instinct, for instance when we have to make a choice between the different line-ups at the post-office, where we detect the shortest line, the least likely troublesome clients, etc.

As no other, tax administrations have to deal with large numbers of risks. This may concern either risk of non-compliance including risk of tax fraud, risk of insolvency by the taxpayer etc. Risk Management allows us to deal with these risks. The term 'risk management' can have many different meanings dependent on the area in which it is used but all have one thing in common in that it helps us to treat risks which appear to threaten our missions but which also can provide us with a quality assurance for our actions.

The objective of applying Risk Management in this context is to enable a tax administration to accomplish its mission(s) by facilitating management to make better decisions. The Risk Management *process* helps to identify the different steps in the decision-making process, and allows us to make explicit and more educated decisions, in each stage of the process before moving on to the next one. As a result, Risk Management allows us to better measure the quality of each of the individual stages of the decision-making process, making it easier to detect mistakes.

Furthermore, Risk Management helps us to:

- achieve equal treatment of the taxpayers;

- focus the burden of audit to non-compliant taxpayers;

- best use of the available human, financial and technical resources;

- increase the level of voluntary compliance of taxpayers;

- adjust available resources to the levels of risks;

- weigh the possibilities that a compliant taxpayer could become non-compliant.

In the context of this Guide, Risk Management can be defined as a technique to improve the tax administration's effectiveness in dealing with risks. This may result in measures aimed at avoiding non-compliance by taxpayers, or when it is decided that active treatment is required, better targeting of the available treatment options.

As such, this Guide provides a common foundation for decisions at all management levels within tax administrations, where each has to make the most educated decision about budgets and resources.

1.1. Introducing the Risk Management process

The primary goal of the tax authorities is to collect the taxes payable in accordance with the law in such a manner that will sustain confidence in the tax system. Some taxpayers, due to ignorance, carelessness or deliberate actions as well as weaknesses in a tax administration, fail to meet their obligations. Therefore, tax administrations should have in place strategies and structures to ensure that non-compliance with tax law or tax fraud is kept to the minimum possible.

Increasing the effectiveness of the Risk Management function is now more important than ever. There are several factors, which are recognised as increasing the risks faced by the tax authorities, such as the complexity and innovations in business structures, new financial products, large numbers of taxable persons and services, e-commerce developments, etc. At the same time, tax administrations are often faced with the need to work more efficiently, not only in view of public opinion, which demands new levels of efficiency and accountability of government services, but also in view of reductions in budgets and restrictions to hire new personnel.

All that dictates new and flexible actions and approaches for tax administrations. Many tax administrations, in order to cope with the above-mentioned challenges, have introduced specific procedures incorporated in a general framework, the so-called Risk Management process.

The Risk Management process can be illustrated as a continuous loop, in a model having the following steps: **Risk Identification, Risk Analysis, Risk Assessment and Prioritisation, Treatment and Evaluation**. To this illustration, also the additional links with **Strategy** has been inserted. After all, strategy not only influences the content of the steps but in return, the process has also impact on the strategy.
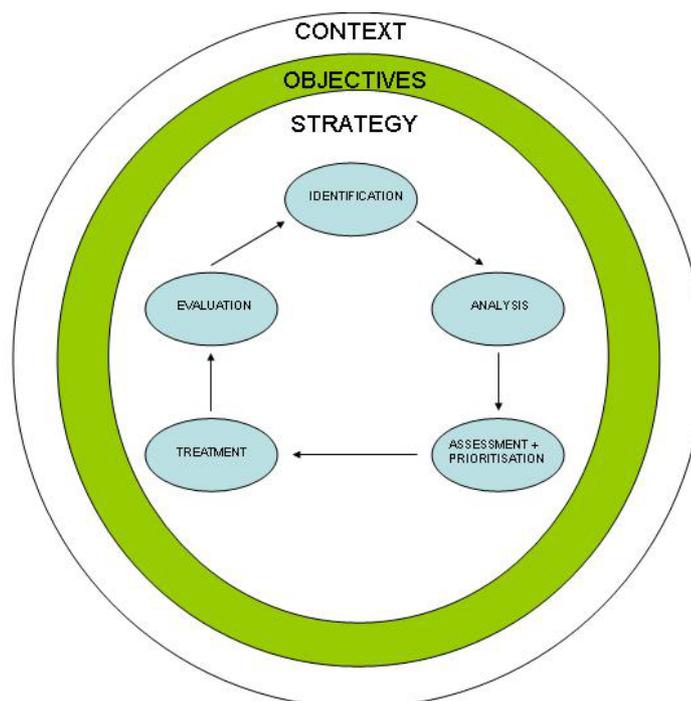
Fig. Risk Management process model

Central to this process is the *operational context* (or more correctly *contexts)* which can be defined as all the combination of facts or circumstances that surround an organisation, and which in the short to medium term should be considered as a given. Context can also be defined as the 'environments' in which the tax administration operates.

The objectives of the organisation are the specifically measurable outcomes which, when completed, will achieve the stated goal. Such goals can be defined at central level, but also at regional or functional level. Usually, the central objective for a tax administration is to collect the right amount of taxes at the right time. As can be seen from the model, the context and objectives are not part of the Risk Management process itself.

Risk identification is the first step of an ongoing Risk Management task which is the determination of the likely sources of risk and the magnitude of that risk which threatens the objectives of the organisation. This phase of the process provides a list of potential risks.

Output: what can go wrong?

Risk analysis is the phase when the risks are examined in order to discover essential components and features. It is performed by gathering and understanding computer held data, human knowledge and intelligence. By refining *data* and *information*, *knowledge* (intelligence) about the risks can be attained.

Aspects which play a role here are frequency (the number of risks/risky taxpayers), likelihood (how big is the probability that the risk is to occur) the gravity (the chance that the risk materialises) and impact (what is the consequence of the occurrence of the risk, which refers to the magnitude of harm that could be caused by a threat's exercise of a vulnerability).

However, finding out *what* is occurring and *who* is doing it is not enough. Risk analysis also involves the *why* question: *why* is the taxpayer behaving in a particular fashion. This is important because it contributes to the assessment and the choice of the most efficient and effective form of treatment.

Output: knowledge about the risks: how likely is it that risk materialises and, how big is the impact on the objectives: low, medium, high, very high, knowledge about taxpayers' behaviour, knowledge about trends; knowledge about (the cost of) treatment options.

Risk assessment and prioritisation. The next (and most central) phase of the process is the phase, which first starts with feeding the results of the previous phase into a so-called Risk prioritisation matrix. Having assessed the risks one must seek to identify those which are the most significant, which allows us to consider as to how risks should be prioritised.

Impact should not only be defined in financial terms, but could be political, economic, social, technical, environmental or legal. Before establishing a list

of priorities, the result of the matrix should be offset against more variables such as:

- the available resources in dealing with the risk: it would not make sense to prioritise certain risks which can not be effectively reduced with the resources at hand;

- the cost effectiveness of dealing with the risk; under some circumstances it may be better to accept certain risks if other risks can be covered in a more cost-effective way

Output: a list of risks and corresponding qualification of whether it is necessary to provide treatment. Qualification, for each identified risk can be ranging from very low acceptable risks for which no action is required, to very high intolerable risks requiring urgent action.

Risk treatment can be defined as 'the process in which the negative impact of the risk on the administrations objectives is neutralised'. This can be done in several ways:

Risk Transfer, by passing the risk to other parties;

Risk Reduction, by using methods to minimise the frequency and/or the extent of the risk in the coming period;

Risk Covering, by carry out activities to neutralise the impact of an occurred risk or prevent a potential one from occurring.

The easiest way, risk transfer, is only possible in some specific areas. This means that reduction and covering are the most important possibilities of risk treatment. As tax administrations are obliged to make the most efficient use of the limited human and other resources, they will try to minimise the costs of enforcement. Therefore, preference will be given to those forms of treatment which reach a certain level of effectiveness against the most minimal use of resources. This means that in general, first risk reducing forms of treatment will be used, and then forms of risk covering using little capacity followed by those covering methods using more capacity. The chain will be strongest if the preventive/reducing activities are tuned to, and in balance and related with the covering activities.

Output: a list of treatment activities: number of audits, information-campaigns etc.

Outcome: a higher compliance level in terms of lower risk levels, lower extent of risks and/or corrections on tax returns including penalties.

Evaluation is used to measure each step of the Risk Management model, and is an important indicator of our effectiveness and efficiency in dealing with each of the steps in the process. In other words: did we identify the risks correctly, did we apply the rights prioritisation, and was our treatment correct? An effective evaluation framework should not only look at the process itself, but also at the intended external effects: did the use of Risk Management improve the effects of our audits, what was the effect on

compliance and tax fraud, was there an effect on the tax gap ? It is important to consider the evaluation not only at the end of the process, but also beforehand by considering objectives and evaluation criteria for each of the actions involved.

Output: information on the achieved effects or quality of the output of the different activities. This can relate to the individual steps of the Risk Management process, the process as a whole, or the tax administration itself. This information will serve as a feedback on these different processes and entities.

1.2. Limitations of Risk Management

As much as Risk Management is an instrument to allow tax administrations to make best use of their resources, we should also look at its limitations, as solutions to decrease non-compliance or to fight fraud need more structural approaches. Sometimes, it is the tax laws themselves which represent a category of risk, to be treated by changing the legal framework itself rather than by the way in which it is administered. In practice, many factors may directly influence Risk Management decision-making such as:

- variations in a tax authority's financial resources that may substantially affect its capacity to deal with all of the risks identified;

- likely government positions on specific tax legislation changes, e.g. powers for officials, that may represent an opportunity to deal with a risk;

- weaknesses or shortages in staff skills that may seriously prevent a tax authority's ability to deal with major risks.

1.3. Risk Management in a future perspective

As much as Risk Management is based on universal and basic theoretical concepts it can be said that when applied to tax administrations it is a way of working and thinking that develops continuously. A Guide like this would not be complete if it would not contribute to this ongoing development.

A few years ago Risk Management was more or less applied as a form of risk analysis, focused mainly on better selection for tax audits. As the Risk Management approach has evolved it is now applied in a more structured way and using more advanced technology. This evolution will continue but some new elements will emerge.

This leads to a way of thinking that, in the long run, will change the administration in a more profound way. Tax administration is not about detecting tax evasion and applying sanctions, it is about ensuring compliance and in order to achieve this, a holistic and cooperative approach is necessary. New risks will emerge and new forms of treatment will be necessary that involves different parts of society.

In practice, this means that over the next years the following developments may be predicted:

- more tax administrations will make Risk Management an explicit part of their organisational structure by creating operational risk intelligence units and use Risk Management as an integrated tool for all planning and decision processes;

- concentration and specialisation of risk management will allow for a higher level of professionalism and as such, tax administrations will be better equipped to exchange risk information to or from tax administrations in other Member States;

- rather than to focus on particular taxes a more comprehensive risk picture may be developed by considering a wider range of risk criteria and treatment options taking into account all tax related risk criteria in respect of a (group of) taxpayers given that risk areas are likely to spill over from one tax to another;

- the development of common criteria will help Member States to enhance cooperation through mutual assistance for example, through the harmonisation of classification criteria for different tax-payers risk categories.

1.4. Structure of the Guide

The remaining sections of this guide discuss the following:

• Part 2 discusses Principles and theories

• Part 3 provides Practical examples

• Part 4 provides Technical details (Statistics, variables, mathematics, I.T)

• Part 5 provides Organisational aspects of Risk Management

PART 2 Principles & Theories

2. INTRODUCTION

In an ideal, law-abiding society, people would pay the taxes they owe, and tax administrations would only facilitate provisions for citizens to carry out the responsibility. No such society exists. Compliance with tax laws must be created, cultivated, monitored and enforced in any society.

Tax administration is a complex task. The "best" tax administration is not simply one which collects the most revenues; facilitating tax compliance is not simply a matter of adequately penalising non-compliance. Tax administration depends on much more and there is a complex interaction between various environmental factors.

The objective of applying Risk Management is to enable a tax administration to accomplish its mission(s) by facilitating management to make better decisions. Risk management is a structured process, consisting of well-defined steps, according to which a systematic identification, analysis, prioritisation and treatment of risks is taking place, so as to support improved decision-making.
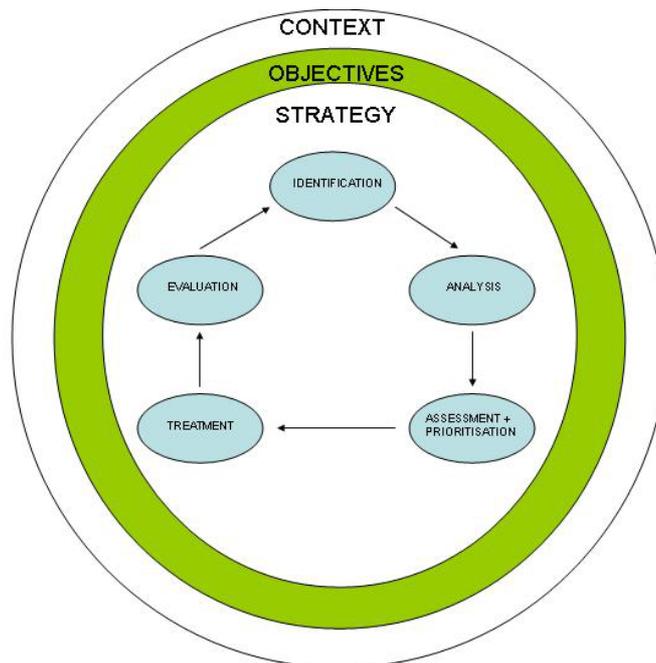
Fig. Risk Management process model

The primary goal of the tax authorities is to collect the taxes payable in accordance with the law in such a manner that will sustain confidence in the tax system. Some taxpayers, due to ignorance, carelessness or deliberate actions as well as weaknesses in a tax administration, fail to meet their obligations.

Therefore, tax administrations should have in place strategies and structures to ensure that non-compliance with tax law is kept to a minimum level.

Compliance essentially relates to the extent to which a taxpayer meets its obligations. Risk management looks at risks that affect compliance to fulfil the obligations such as registering, filing, reporting, and remitting of tax.

Purpose of risk management

Risk management means taking deliberate action to improve the odds of good outcome and reducing the odds of bad outcome. Risk management is not a magic formula that always will give the right answers. It is a way of working and thinking that will give better answers to better questions. It is a tool for decision-making and will help the organisation to reach its objectives.

The general objective is to provide value for the administrations stakeholders. Value is created, preserved or eroded by management decisions ranging from strategy setting to operating the administration day-to-day. Inherent in decisions is recognition of risk and opportunity, requiring that management considers information about internal and external environments deploy precious resources and recalibrates activities to changing circumstances.

No administration operates in a risk-free environment and risk management does not create such an environment. Risk management enables management to operate more effectively in environments filled with risks.

Definition of risk

Risk can be defined as:

> *Anything negative that can affect the organisation's ability to achieve its objectives*

The concept of risk has it roots in the ancient Italian maritime trade. It stems from the combination of the concept of chance or uncertainty on the seas and the materiality of loss of ships and cargo (regretfully, crew was expendable). In order to have risk, one must have both uncertainty and exposure to loss. Risk consists of the following characteristics; vulnerability, severity or significance and relative occurrence or frequency.

Risks are events or circumstances that could or will result in problems for the organisation. Risks should be defined to a level such that the risk and causes are understandable and can be accurately assessed. Risk covering all of the following:

- Hazard   - bad things are happening

- Uncertainty   - things are not occurring as expected

- Opportunity   - good things are not happening

The understanding of this concept is imperative. The risk definition makes it clear that the organisation's objectives are the starting point for identifying risks. Without an understanding of the objectives, it is not possible to identify risks. The identification of risks has to start with high-level objectives and continue with other objectives on different levels. The risk is the events or circumstances that could

result in a bad outcome (not reaching the objectives). These events or circumstances must be identified.

If the objective is to increase the level of voluntary compliance, *dishonest* taxpaying behaviour will represent a risk. On the other hand, if the objective is to maximise revenue from audit activities, *honest* taxpaying behaviour will represent a risk. It is the objectives that decide what the risks are. The risks will be quite different depending on the objectives.

Both external and internal risks should be identified but focus should be on risks that are possible to be influenced in some degree by the tax administration. External risks are for instances taxpayer behaviour and different factors depending on the external environment. Internal risks are for instance tax officer behaviour (like corruption). It is important to cover both external and internal risks in some way.

A. THE RISK MANAGEMENT ENVIRONMENT

2.1. Context

Central to the risk management process is the *operational context* which can be defined as the 'environments' in which the tax administration operates. There exist a wide variety of environmental and organisational factors that have to be considered. Context can be viewed as the playing field together with the rules of the game. This is the framework that risk management is applied within. The objectives describe the purpose of the game, what to achieve. The strategy describes how to play the game in order to reach the objectives. Within this framework, risk management is used in order to decide what to do in order to reach the objectives.

There is any number of contexts in which the administration works both external and internal, some are economic, and some are at governmental level, some at national and regional level.

2.1.1. External context

A number of factors in the external environment affect the operation context, including legislation, public opinion and economic conditions. Examples of external factors are described below.

Legislation

The laws provide the basis for taxation. It is not possible to appraise the efficiency or effectiveness of tax administration without taking into account both the degree of complexity of the tax structure it is expected to administer and the extent to which that structure remains stable over time. Even the most sophisticated tax administration can easily be overloaded with impossible tasks. Enforcing a bad tax law well is usually not a good idea. For a law to be enforced properly, it should both be appropriate to the environment and enforceable: good enforcement requires good tax law. The law also sets the framework for the Tax Administration's formal powers.

Public opinion

Examples of important public opinion are taxpayer attitudes toward taxation and toward government in general. Attitudes affect intentions and intentions affect behaviour. Attitudes are formed in a social context by such factors as the perceived level of evasion, the perceived fairness of the tax structure, its complexity and stability, how it is administered, the value attached to government activities and the legitimacy of government.

Economic conditions

The economic environment also has an important impact on the effectiveness of tax administration. Factors to consider could be the size of the economy and its influence on trading partners, its accessibility to and from other markets, the competitive tax policies of its main trading partners and the nature of its economy.

Many administrations focus upon existing processes within the administration, with a lower priority being given to consideration of the industrial and commercial world. In addition to perhaps placing unnecessary burdens on business it is possible that the administration could be creating risks to the revenue. It is therefore important to consider taxation from the taxpayers' viewpoint.

Globalisation and internationalisation influence the capacity to collect taxes and audit taxpayers. Corporations that operate internationally no longer consider national borders as an impediment to their activities.

2.1.2. Internal context

A number of key internal capabilities impact upon risks associated with the administration of a taxation system. These include organisation, resources and tools. Examples of internal factors are described below.

Organisation

The organisational culture and structure is important. First and most importantly, risk awareness at all administrational levels is necessary to manage risk successfully.

All officials have to understand and accept what they are doing and why they are doing it. Like in a gear mechanism, all parts of the administration must fit their contributions together, or the whole mechanism will not work.

The structure and characteristics should be aligned to the mission statement and treatment strategies so that the organisation can operate effectively and efficiently.

Resources

The number of employees and their level of training and education are also part of the context. As a consequence of a risk-oriented approach, the allocation of human and other resources must be made according to risk and not the other way around. This means that treatment strategies should not be based on the current knowledge or location of staff. Treatment should be

based on the prioritised risk and knowledge, the location of staff will need to adapt to this over the course of time.

Tools and access to data

The availability of IT-tools and access to data is of great importance. Intensive use of information technology creates opportunities to improve the performance of the Tax Administration. It affects factors such as reliable and updated taxpayer files as well as databases with crosschecking possibilities. Advanced tools are of no use if access to data is poor. The level of gathering data in digital form is therefore crucial to the administration.

2.2. Objectives

Objectives describe the desired outcome and state what has to be achieved at any administrative level within an organisation. There is a direct relationship between objectives, which are what an organisation strives to achieve, and the risk management process, which represents what is needed to achieve them.

The objectives decide what risks are to be identified. The objectives also have an impact on the risk assessment and on how the risks are being addressed. Every decision that is made in the risk management process must be take account of the objective(s) the organisation is trying to reach.

Risk is derived from the objectives. One example can describe this.

> *Your objective is to sail your ship from harbour A to harbour B. Based on this objective, you can start identifying risks. Risks can be storms, technical failure, and other events or circumstances. These risks need to be assessed and prioritised. According to the objective, is a safe arrival more important than a hasty but risky one? If your objective is to reach harbour B in a hurry you may decide to take the risk by going through the bad weather.*

Setting an objective aimed solely at raising additional tax from incorrect returns may lead to a year on year achievement. This gives the impression that the correct risks have been identified and the treatment has been the right one. One way of achieving the objective can be by waiting for longer periods between identifying the risk and treating it such that the errors multiply. This may lead to a further risk that was not considered when adopting this objective, namely, the ability of the taxpayer to pay the larger assessment years later. By waiting for longer periods, as in the above situation, it also becomes more difficult to change the taxpayer's behaviour. By focusing on the wrong objective and therefore handling the wrong risks, the actual tax gap may get bigger.

When risks have been derived from the objectives is it also possible to derive new objectives from the risks. In order to address a risk, an objective to achieve something could be stated. This objective would be a lower-level objective targeting a higher-level objective. For instance, if tax fraud is perceived as a risk, an objective could be that a good mutual administrative assistance process should be developed. This new objective (better administrative assistance) could then be used for identifying new (lower-level) objectives (for example: lower levels of irrecoverable losses for foreign taxpayers.

For a tax administration, it could look like this:

High-level objective:	Increase voluntary compliance
Identified risk:	Lack of confidence in the tax administration
New objective:	Increase confidence in the tax administration
New risk:	Tax officers treating taxpayers badly
New objective:	Change attitudes amongst tax officers

Etc

This shows that an objective must exist in order to start working with risk management. The objective is the starting point but when the process is working, it can also have an impact on the objectives.

2.3. Strategy

Strategy is an approach that is used in order to reach an objective. The objective describes what to achieve, the strategy describes *how* to do it. Strategy bridges the gap between objectives and activities. Strategy which by itself depends on the context has no existence apart from the objectives sought. It is a general framework that provides guidance for actions to be taken and, at the same time, is shaped by the actions taken.

Risk management is a process that supports the development and review of strategies, but it does not create a strategy itself. The implementation of risk management must start with the development of a strategy.

A strategy could be a set of *methods or principles* describing how to act. However, strategy also incorporates principles for *ways of thinking*. It is also necessary that the strategies be based on *knowledge*. Knowledge is an absolute necessary part of risk management, regardless of risk model, structure and definitions. Without knowledge about the tax gap, taxpayer behaviour and the effectiveness of different treatment options, risk management is of no use. Based on methods, principles, way of thinking and knowledge it is possible to decide how the objectives are going to be reached.

Methods, principles and ways of thinking

Strategic thinking involves thinking and acting within a certain set of assumptions and potential alternatives as well as challenging existing assumptions and alternatives, potentially leading to new and more appropriate ones.

The strategy should make it easier to choose an appropriate line of action. Some assumptions and principles could be established. These must be based on the objectives.

If the objective is to increase voluntary compliance such assumptions or principles could be:

– as first priority address taxpayer future behaviour, to identify and correct historical errors are not equally important;

– an assumption that the taxpayer is honest as long as nothing else is proven;

–   that there is not justification to use extreme measure against one or a few taxpayers in order to influence behaviour of others;

–   to detect small errors early than to detect big errors late.

–   carried out in a way that shows respect and understanding for the situation of the taxpayer.

Predefined principles and assumption can be very useful but it is not enough. Strategic thinking must also incorporate methods of how one should think, and not only what to think. This is necessary in order to constantly develop the work and to cope with new situations.

When a strategic decision has to be made it is important to focus on what the organisation wants to do or achieve. This focus on intent is important because it prevents the organisation from only looking at the obstacles. If focus is on limitations and obstacles it will be more difficult to find solutions and possible way forward.

All members of an organisation have a mental model about how things work. The mental models are structures that affect the behaviour of the organisation. New ways of working fail to get put into practice because they conflict with deeply held internal images of how the world works, images that limit us to familiar ways of thinking and acting. Mental models can be improved or changed by surfacing the existing ones and to confront these with facts about how things work. New knowledge, reflection and discussions tend to be an effective recipe for influencing mental models.

It is also important to be able to think outside the box and to see the big picture. Most problems have a series of different inter-related causes. To understand the patterns will make it easier to identify possible solutions. It is seldom that there exists a quick fix for complicated problems. It is important to have a holistic view. It is very difficult to optimise the outcome for the end user without a holistic view based on a dynamic way of thinking.

Knowledge

Historically, many tax 'administration has addressed compliance risks only in terms of enforcement programmes. Traditional reactive intervention strategies such as comprehensive audit represent expensive, though necessary approaches to addressing some aspect of non-compliance. But a "single action" strategy is unlikely to be successful, particular one based solely on enforcement actions. By giving greater attention to understanding, the factors that shape taxpayers' compliance behaviour a more effective set of responses can be crafted and implemented.

What induces compliance with tax laws has been subject to extensive research. The traditional view in economic models of taxpayer behaviour has not proven consistent with empiric evidence. A host of other factors such as social values, public morality, and people's perception about the fairness of the system also matter in shaping attitudes to tax laws.

The knowledge in itself is not part of the strategy but the strategy is that decisions should be based on knowledge. Without knowledge about taxpayer behaviour and the effectiveness of treatment strategies, good decisions cannot be made.

How to reach the objectives

Based on methods, principles, way of thinking and knowledge, it is possible to decide how the objectives are going to be reached.

Tax administrations must foster, and not simply enforce, tax compliance. This includes facilitating compliance, monitoring compliance and dealing with non-compliance.

Facilitating compliance involves such elements as improving services to taxpayers by providing them with clear instructions, understandable forms, and assistance and information as necessary. Monitoring compliance requires information systems as well as appropriate procedures to detect non-compliance. Improving compliance requires a mix of both these measures and such additional measures to deter non-compliance such as the effective application of penalties. As a rule, successful strategies require an appropriate mix of all these approaches.

Compliance is most likely to be optimised when a tax administration pursues a citizen-inclusive approach to compliance through policies that encourage dialogue and persuasion, combined with an effective mix of incentives and sanctions. Integrity and compliance are most at risk of parting ways when a tax administration seeks to improve compliance solely through making changes to the administrative or legal infrastructure without regard to the sensibilities of citizens.

Based on this a strategy on how to act could have the following approaches:

Increase the willingness to comply

- Influence attitudes and norms
- Reduce neutralisation factors (like "everybody cheats")
- Explain why one should comply

Make it easy to comply

- Simplify
- Assist
- Inform

Use incentives

- Detection of non-compliance
- Punishment
- Rewards for compliance

Even if this is three different approaches, approaches two and three have impact on the willingness to comply (approach one). The actions should therefore be done in the order they are described, but all three should be used. If taxpayers are mostly unwilling to comply and if it is difficult to do so, incentives will have little chance

of success. Incentives can encourage and support certain behaviour but it can't change behaviour in any fundamental way.

B THE RISK MANAGEMENT PROCESS

2.4. Risk identification

The first step in the risk management process is the identification of risks. During the phase of risk identification, potential risks that threaten the objectives of the organisation are recorded. Risk identification is an important phase because if risks are not identified here, the odds are that it will never be identified and thus never will be covered. In addition, the moment when a risk is identified is crucial. The earlier identification takes place, the earlier attention can be paid. Thus, not only the collecting risk of non-payment is reduced but also the preventive effect is higher, because the period of time between the moment of offence and that of punishment is shorter. The phase of risk identification provides a list of potential risks.

2.4.1. Risk Genres

Risks can be categorised under four *genres*:

(1)   Register Risk:

Risk that tax yield is reduced by:

– persons ineligible for tax registration becoming registered or remain registered when eligibility ceases, or

– that those that fulfil the requirements to register fail to do so, or

– incorrect information being held on the register.

Three distinct risks fall within this category:

– *those that are on the register but have no entitlement to registration:* within the first category the full range of taxpayers can be found, ranging from 'Carousel' fraudsters and classic repayment frauds through to potentially compliant taxpayers who by act of error or omission have remained registered when entitlement ceases.

– *those who should be registered but who are not*: this encompasses the informal economy and those taxpayers who use avoidance devices to remain unregistered.

– *wrong information about a taxpayer being held on the register:* whereas data quality will always be an issue, this category shows that there is also the potential for tax loss due to incorrect information being held.

(2)   Filing Risk

Risk that tax yield will be understated/reduced by taxpayers not filing their returns by the due date.

In order to provide the correct preventive and corrective treatments there is a need to be able to target those taxpayers likely to file their returns late, or not

at all. Although this risk cannot be ignored during an audit, there are many other treatment options available to tax administrations.

(3) Payment Risk

Risk that tax yield will be reduced by non-payment of amounts due on tax returns and assessments. Payment risk and filing risk could be closely related but it is important to analyse them separately since the treatments may vary.

(4) Declaration Risk

Risk that tax yield will be affected where the amounts shown on the tax return are incorrect by error or deliberate act. Traditionally, many tax administrations concentrated on this risk area with the intention of determining which cases should be selected for conducting audit activity. It is now being increasingly recognised that other treatment options are available to verify that the declarations made by taxpayers are correct and where error or fraud is discovered, to allow for corrective action to be taken.

By classifying risk under these headings, any tax administration will be in a stronger position to determine the appropriate treatment technique. Within each of these *genres,* there is a wide spectrum of sub-sets and individual risks.

2.4.2. Levels of identification

As (one of) the main objectives of the tax administration is to ensure that the right amount of tax is paid, the preferable starting point of the phase of identification is an answer to the question of 'what is missing' (the tax gap, the potential tax yield minus the actual tax revenues). The tax gap reflects the financial extent of the risk field. The determination of the tax gap is not easy, sometimes statistical support is possible, based on research, data and analysis. However, often the only thing that can be done is a rough estimation.

If possible, the calculated gap can be further broken down into areas such as barely legitimate tax avoidance, fraud, serious non-compliance, error and debt. This provides additional information on areas that should be addressed. The gap also can be broken down into sectors. In some instances, the major problem may be that many potential taxpayers are simply not known to the tax administration. In others, it may be that many taxpayers who are in the system are substantially underreporting their tax liability. There may also be instances where both problems may be important. The last focus for the tax gap is the contribution by the size of the taxpayer, for example what is the extent of the tax gap for large businesses, for medium businesses and for small businesses? Insight into this can support the direction of risk identification.

Strictly theoretical, the sum of the individual risks identified must be equal to the whole of the tax gap. To identify risks both top down and bottom up methods can be used.

Risks can be identified and described at different levels. One way of identifying risks is to start at the high level and drill down to detailed risk and taxpayer level:

– general level – a general risk overview on risky fields or the groups of taxpayers with different compliance levels.

– medium level – risk areas / group of taxpayers, for example the area of under recorded income or the risks related to a group of taxpayers with a specific compliance level.

– detailed level – identification of taxpayers / risk areas. An example here is the fiscal numbers of taxpayers with a high risk of under recorded income. Another is a list of taxpayers with an expected relative low compliance level and an overview of the related risks.

Mostly this model is used top down, but also a bottom up approach is possible, related to the sources used for identification.

Another basic element to keep in mind is the difference between risky acts and risky actors. Some activities possess a higher risk level than others. The same can be said of taxpayers, they have different compliance levels. Risk identification will therefore always refer to those two elements.

A general risk overview can be helpful at this early stage because it provides insight without too many details. Simply recorded, such a document gives a general overview of the tax gap and how it is divided in different areas. It also gives a description of demographic and economic development and possible regional differences including major risks and recent trends. Last but not least, it provides the direction for identification of activities.

2.4.3. Risk areas / groups of taxpayers

The entrance to the medium level identification is the risk area of a group of taxpayers.

Risk area

A risk area is a collection of connected risks, for example, risks referring to turnover or to a specific part of tax legislation. Different risk areas can be identified and described in a risk register, a national risk database.

It is important to identify risks area by area but it is equally important to recognise that a risk in one area can have an impact on one or more risks in other areas.

Groups of taxpayers

Taxpayers can be grouped in different ways, for example in sectors (such as construction or electronic commerce), level of importance, legal form, compliance level or a combination of these. The compliance level is of course always a rough calculation based on a number of criteria that say

something about the degree of the known (tax) behaviour by a taxpayer, for example:

– the regularity of the tax returns;

– the appearance of any supplementary payments;

– the quality of the administration (bookkeeping);

– the appearance of corrections on the tax return in the past;

– the regularity of payment.

The compliance level can be shown in the shape of a triangle, the compliance pyramid.

Several possibilities exist for measuring the level of importance. For example, the turnover is an indicator, or the total balance amount. Specifically for fiscal purposes, the sum of the yearly paid tax (only VAT or VAT plus direct taxes) can be used as an indicator.

Compliance pyramid

Deliberate fraud

General non-compliant

Attempt to comply, but fail

Compliant

2.4.4. Completing the identification

Risk identification includes a (rough) estimation of the risk related tax gap, the number of taxpayers/taxpayers involved and possible relations with other risk areas. On the final, lowest, level the risk area is categorised into detailed risks and the groups of those taxpayers potentially involved are identified and described. For example if the entrance was the risk of underdeclaration of turnover, the final stage is the identification of sectors in which this risk is (very) high, for example pubs.

If the entrance was the group of taxpayers the final level contains the description of the risk area(s) within the defined group. For example, when the entrance was a high-risk sector as pubs, the final stage is the identification of risky areas in this sector, for example underdeclaration of turnover.

The combination of both entrances always gives a clear risk picture, ready to be analysed.

2.4.5. *Sources for risk identification*

For risk identification, several sources are available. None of them are perfect and enough for a 100% result. This only can be approached by a balanced and combined use of all the available sources.

(1)   Horizon scans

Monitoring the developments outside gives input for the identification of new risks or a mutation from an existing one. This is an almost continuous process. It includes information from media, research (horizon scanning) and other sources. In addition, cooperation with other tax administrations and law enforcement organisations may result in an exchange of developments and the awareness of new risks. The trick is to get insight about the present in order to have foresight about the future. For example, research in the area of the development of new traders not only gives information about the expected number of start-up businesses but also the sectors that are booming. Related to the risk level of those sectors preparations can be made for covering the risk.

(2)   Society support

Another possibility for risk identification is the support from society. Not only from trade sector organisations, consumer organisations or tax consultancy organisations but also support from individual citizens. In some cases, the interests of organisations are equal with those of the tax administration and cooperation is possible in a 'win-win' situation. In addition, facilitation of incidental reports is needed. Trade or sector organisations can give, for example, information about the risky areas in the business but also information about non-compliant businesses.

(3)   New legislation

New tax legislation, but sometimes also other legislation, could result in new risks and the disappearance of some existing ones. It is important here to step into the shoes of the taxpayer: which elements of the new legislation will offer new opportunities to be non-compliant.

(4)   Data mining / risk analysis

The use of modern techniques of data mining can point to the identification of risks not identified earlier. The same can be said of risk analysis. The phase of risk analysis normally follows the one of identification, but it may be that during the analyses new risks will crop up.

(5)   Random audits

The use of audits done to randomly chosen taxpayers has more than one aim. As well as being used to identify an underlying level of compliance, it can

also be used for the collection of new risks. It is obvious that for the best result this sort of audit has to be done by experienced and well-skilled staff.

(6)   Pioneer investigations: 'test drilling/piloting'

Within some areas, groups of taxpayers are identified as probably having a higher or emerging risk, so pioneer investigations may be effective. This can not only identify the real risks, but also offer experience as to how these risks can be covered in the most efficient and effective way.

(7)   Signals from the shop-floor

Last but not least, an important source for risk identification is the tax official, the professional, and the front-line staff. They are in contact with the taxpayer every day. An open mind is needed to spot new things, new developments in the trade of the taxpayer. Some of them may indicate new risks or changing existing ones. It is obvious that simple processes facilitating reporting new risks encourage the professional to share knowledge with others.

The last three sources give input for a bottom up approach of risk identification. Risk identification does not only take place at a central level. Parts of it also can be done at regional or local level, probably in combination and in cooperation with the other level(s). The combination of the identified risks and the estimated occurrence gives a picture of the risk field.

2.4.6. Risk picture

The result of the stage of risk identification is the risk picture. It shows areas, groups of taxpayers or sectors where risks are expected. This picture can facilitate choices for the next phase, risk analysis. For example, to which areas must the analysis be pointed. However, there is only one version of the truth. That means that attention has to be paid to the description of the risks to avoid the situation that the same risks, explained or categorised differently, are duplicated on the list.

The risk picture is not painted only once during a certain period, for example yearly. It is a continuous and dynamic process, following the dynamics of the world around the tax administration. This means that a holistic approach is absolutely necessary in order to do an appropriate identification of risks. The speed of adaptation of changes into risk identification contributes to the flexibility and effectiveness of the tax administration.

2.5.   Risk Analysis

In the phase of risk analysis, risks and risky taxpayers identified in the previous stage are systematically weighed and grouped in relative order. Aspects that play a role here are frequency (the number of risks/risky traders), the gravity (the chance that the risk materializes) and consequence (for example how much money is involved). However, finding out *what* is occurring and *who* is doing it is not enough. Risk analysis also involves the *why* question: what is the reason for non-compliant behaviour in the specific areas. This is important because it contributes to the

assessment and the choice of the most efficient and effective treatments. For example, if the reason for non-compliance is the complexity of a specific part of the tax legislation the possible treatment can be education.

Risk analysis normally requires the use of computer systems because of the sheer volume of data. However, manual analysis and weighting is possible and sometimes even preferable and in some cases human intelligence and professionalism is indispensable. And of course, a combination is possible with a rough mass weighting by machine followed by a specific weighting by people. Risk analysis can be done within the administration, centrally or locally, or in combination.

2.5.1. Sources

Risk analysis is done on the bases of data gathered from sources. In today's world there are many possible sources but only a few of them are relevant for risk analysis. They can be grouped into:

– economic and tax data, for example ratio's about the economic growth, average wages;

– data supplied by taxpayers, for example the data from the tax return(s);

– tax data acquired by administrations, for example the date of last compliance activity, number of returns filed late;

– data supplied by a third party, for example a bank

– information available on the Internet.

The information or data that can be used in analysis is only limited by:

– the ability to capture the information;

– the legality to capture the information;

– the value that new information or data adds on top of what is already available (risk of information overflow)

– the capacity of IT systems in use;

– the costs related to obtaining new data.

2.5.2. Analysis

When data is ready, the identified risks must be analysed. During the analysis the risks are examined in order to discover essential components and features. The pure analysis phase is as a process performed by gathering and understanding computer held data, human knowledge and intelligence. By adding *data* and *information*, *knowledge* (intelligence) about the risks can be attained. Data can be defined as numbers or different items in a database. Data put together results in information and gives meaning. Knowledge is a deeper understanding of this information. It is like a big jigsaw puzzle. The data are the pieces. When put together with the picture, information arises. With the understanding of the meaning of the picture, knowledge is born.

In most cases items of data on their own have no 'value'. They get their value by being compared or related with others. Such a comparison is called

a *variable*. A variable must be weighed in order to create a possibility for pointing to a risk. The result is a *risk indicator*. Risk indicators can point to several sorts of risk.

In an automated area a risk indicator can have the shape of a selection rule, which in combination with certain parameters 'throws out' a tax return for treatment when the figures in the tax return exceeded the parameter.

For example, the risk of underdeclaration of turnover can be calculated. The amount of turnover can be obtained from several sources but the most accurate source is the VAT declaration. An element of the tax return is the turnover (data). The turnover can be related to the amount for the last period or the amount of other similar taxpayers. A risk indicator can be established if the variable is weighted, for example if the growth of the turnover is less than x %.

In addition, more complex indicators and variables occur. That's why in the analysis phase specific knowledge is necessary and the use of techniques such as data mining and data warehousing acquire knowledge on EDP. The developments in automation make sure that the end of possibilities in this area is not achieved yet.

2.5.3. The timing of analysis

The longer a taxpayer remains registered, the more data that can be collected. Risk analysis requires accurate data to be effective and it follows that the more data that is available the more likely it is that any probability predictions will be accurate. Deciding on when or if intervention is required is as much a skill as it is a science and will depend on many factors, not least the overall strategy of the tax administration. As with risk identification, timing is important in the phase of risk analysis. The earlier a risk is analysed, the earlier it can be treated, the lower the risk that the tax money is lost and the bigger the preventive effect for the future.

(1)   Pre-registration

Traditionally, when looking at Register Risk, the aim of administrations has been to ensure that anyone making taxable supplies is identified and registered at the appropriate time. Whereas this still remains the case, with the growth of *Carousel Fraud*, it is imperative that checks are made to ensure that the applicant has a lawful reason to become registered. As part of the registration process, tax administrations may wish to compare the application with such items as:

– other registrations at the same postal code;

– known accommodation addresses;

– mobile phone only shown;

– bank accounts;

– suspect databases;

– credit reference agencies;

– other government department data, etc.

Early contact with a taxpayer to establish that he exists can be considered in an attempt to thwart fraud. It must be recognised that the number of fraudsters trying to obtain tax registration, where no entitlement exists, is likely to be a very small percentage in relation to the total, and any treatment option must be proportionate to the risk. Notwithstanding this, there are options for treating potential risks even before a taxpayer becomes registered and these will include the provision of clear and helpful advice and education; prevention rather than cure.

(2)   Post registration

Except for advice and education regarding filing, payment and declaration risks, the only time that intervention can take place is when the possibility of a risk materialises, and that is after registration. There are several opportunities for risk analysis.

(a)   On receipt of returns

When returns from a taxpayer are received by the administration it is possible to carry out a number of 'rule based' checks:

– the inter-relationship of different figures on the return can be checked to test both accuracy and the credibility of the tax declared;

– the return received can be compared with previous returns submitted by that taxpayer to highlight apparent inconsistencies;

– comparisons can be made with other taxpayers who have a similar profile (size, type of trade, mark up etc), and,

– comparisons with norms and standards.

These checks are particularly useful when a tax refund is being claimed, but their use for payments returns can also be beneficial to the tax administration. The results of any checks will inform the decision process on the type of action needed to address the perceived risk.

(b)   Periodic

Either in addition to, or as an alternative, administrations will need to carry out analysis over a period of time to ensure that risks are being adequately identified. It follows that the timing of any treatment will follow that periodic analysis. Unless there is an imperative need to tackle a risk within a short given time frame, then most tax administrations would prefer to spread their activity over several months or years.

(c)   Incidental

Sometimes the sources for analysis are not structural. In that case the analysis has to be carried out as soon as possible after the moment of the data arrival.

2.5.4. Operational output

In the end, risk analysis results in the knowledge about one or more from the following areas;

– the characteristics of the taxpayers involved;

– the reasons for taxpayer behaviour;

– the likelihood or frequency of the risk;

– the indicators/ selection rules and parameters;

– the consequences;

– the trend, i.e. is the risk becoming more or less severe;

– possible treatment options;

– cost of treatment.

– the impact on the tax administration's objectives: low, medium, high, very high.

The likelihood represents the probability that something will occur. Frequency tells how often something will occur. By studying a risk area the likelihood of tax evasion is often 100 %, but that is not interesting information. The information needed is how common tax evasion is in the risk area, that is, its frequency. Focused on one taxpayer, however, the likelihood of tax evasion is interesting information. The consequences incorporate a lot of different factors but must be based on the administration's objectives. A negative consequence is when the administration cannot reach its objectives. This normally means that the consequence has to be broken down into different factors such as tax amount (extent), impact on public confidence in the tax system, infection risk etc.

It has to be said that a 100% result is not feasible. Not only is this due to missing or inadequate data or inadequate techniques but it would be also an underestimation of the human possibilities and creativity in tax matters.

2.6. Risk ranking, prioritisation and assessment

The preceding phase of risk analysis results in risks and risky taxpayers in terms of numbers, level, extent, the options for treatment and the costs. The central goal of the phase of risk assessment is to choose which risks are to be treated, given the available treatment forms and the available resources (for example, staff time in hours and competences). Both sorts of information about risks and about available resources are therefore necessary in this stage.

The extent gives an indication of the direct loss of tax in the case of risk acceptance. Other tax losses are possible, such as the possible decrease in the compliance level of a group of taxpayers. And other possibilities can occur beyond direct or indirect tax losses. Unfair competition is an example of this as are feelings of inequality and social criticism, which can have possible negative effects on the tax administration's reputation.

2.6.1. *Ranking and prioritisation*

The identified and analysed risks must be ranked and prioritised, because they differ from each other in several ways, for example financially, the appropriate treatment (capacity or timing) or the effect.

Indicators which play a role in this process include:

- the amount of tax which is involved directly. This amount is more or less determined in the risk analysis phase;

- the possible amount of tax which is involved indirectly. This amount can more or less be estimated in the phase of assessment or, if possible, it can be done in the analysis phase. In this area there is a relationship with the tax gap. Information from that field can also be used in this stage;

- the resources for treatment. This can be expressed in staff days or hours, but more information is gained when the ratio "tax per hour" is used – the return on investment;

- deterrent: the treatment of some risks can have positive deterrent effect on society and the taxpayer, but covering others may have a negative result. Awareness of this is crucial, because it gives the tax administration the opportunity to reach the right approach, with the same resources, and have positive effects in the more indirect areas such as compliance levels, social support and image;

- social and compliance effects: the tackling of some risks or taxpayer groups may have a greater effect on the social acceptance and/or the compliance level of taxpayers than others;

- political desires: sometimes specific risks have to be covered because of promises made in parliament. Another example in this area is the wish to pay extra attention to specific risks because new legislation is introduced and the wish to 'bring up' the taxpayer well;

- image: the desired image of the tax administration, not only in terms of 'good guy' or 'bad guy', but also the desired level of perseverance and decisiveness, can play a role. The choice of specific risks may or may not strengthen this;

- at random: In addition to taxpayers chosen on the basis of specific risks, randomly chosen ones must be taken into account. This ensures that every taxpayer has an equal chance of treatment, the baseline of attention. The results of the random activities can identify new risks, new ways of detection or new ways of coverage. And not least, the results can be used as an indicator for the effectiveness of the risk management process which is in use.

The weighing (valuing) of the elements mentioned above amongst them is an internal process. Context, strategy and fixed objectives will play a heavy part in this process, which can take place on a central level, a local level or a combination of both. This makes the process of risk ranking and prioritisation a very dynamic one. However, the result will be a ranked and a prioritised list of risks produced.

2.6.2. Risk assessment

After ranking and prioritisation, it is time to assess the risks which can be treated and those which can't. A choice for risks which will be treated given the available resources is simultaneously a choice for risks which won't and must be accepted. Additional resources result in more risks that can be treated but that might be a negative position. The positive approach is one where specific risks are deliberately accepted, because of the low (financial or social) importance or because they can't be detected or covered. Additional resources focussed in these areas give no solution because treatment of these risks is neither efficient nor effective.

In fact, three ways of treatment are possible with several treatment forms. Because they are described in detail in the next chapter, only the headlines are mentioned here:

(1)   Risk Transfer, by passing the risk to other parties;

(2)   Risk Reduction, using methods to minimise the frequency and/or the extent of the risk in a coming period;

(3)   Risk Covering, carrying out activities to neutralise the impact of an occurred risk.

The easiest way, risk transfer, is only possible in some specific areas. Therefore, reduction and covering remain the most important possibilities of risk treatment. Again, context, strategy and objectives will play their role in this. On one hand, the enforcement of the law must meet all requirements of equity, whilst on the other, for reasons of effective and efficient performance of their duties, the tax administration must make choices with respect to the degree of examination. This means that the treatment must be business-like and based upon rational arguments instead of arbitrary choices.

Reducing and preventing activities are, in general, undertaken *before*, risk covering activities *after*, the arrival of the tax return. Furthermore, the nature of reducing activities mostly is more general and therefore often not focussed on an individual taxpayer, sometimes the individual is completely anonymous. In contrast, risk covering activities are almost always related to an individual taxpayer.

The tax administration is obliged to make the most efficient use of the limited human and other resources and will try to minimise the costs of enforcement. So preference will be given to those forms of treatment which reach a certain level of effectiveness against the most minimal use of resources.

This means that in general, risk reducing forms of treatment will be used first, and then forms of risk covering using little capacity followed by methods using more capacity. The chain will be the strongest if the preventive/reducing activities are tuned to, and in balance and related with the risk covering activities. Very often an optimum result is gained with a combination of actions, of treatment forms. This is the kernel of risk

management: knowing how to allocate available resources in the most efficient way to get an optimal result.

The many measures available can be used on a specific risk or taxpayer level but also on a general level. Which measures to be chosen depends on the specifications of the risk and the taxpayer. They should ideally reflect where on the compliance spectrum or pyramid a taxpayer is placed. Clearly, the provision of help and advice is not appropriate to a fraudster, nor is a full investigation for a compliant taxpayer. Where analysis is able to distinguish the relative compliance, then this will aid the appropriate decision. However, more often than not, analysis will only point to particular risk areas or relativities and not to where on the scale of compliance a particular taxpayer belongs.
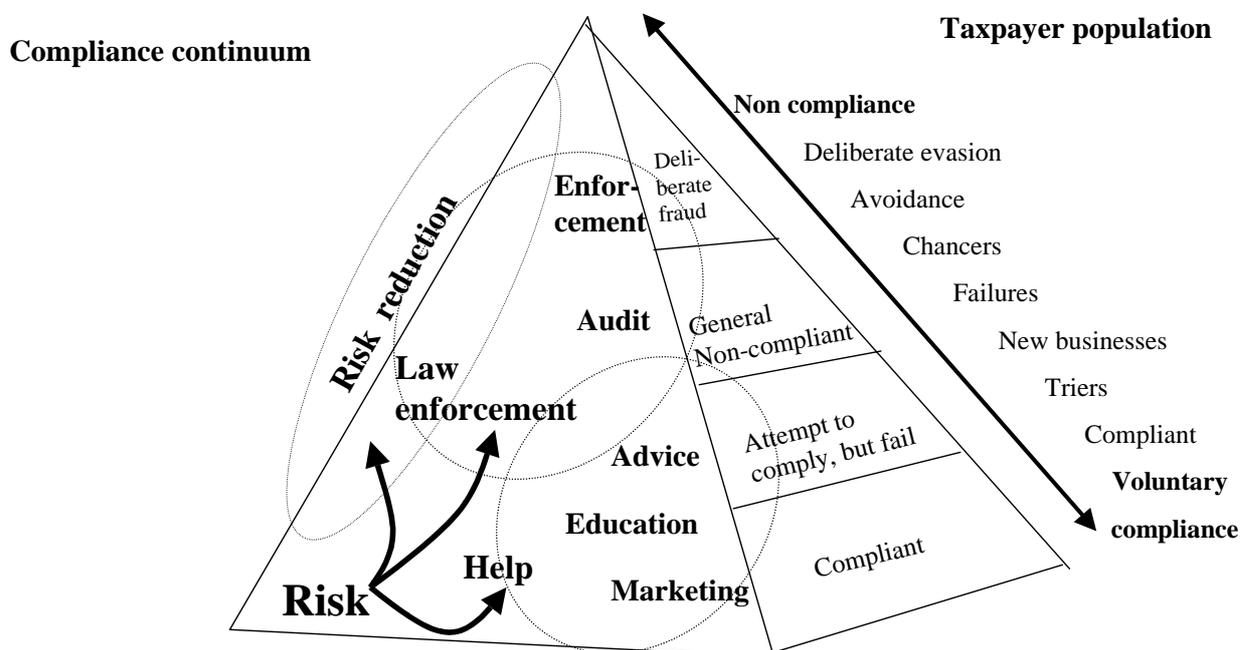
The compliance continuum, or compliance spectrum, visualises the connection between the degree of compliance, as earlier shown in the 'pyramid', and the optimal effect of the several treatment forms.

All these elements have to be taken into account in assessing the risks which will be treated and the treatment form which is preferred. The result of the assessment phase is the risk mix, the risks which will be treated in one way or another in a given period. Risk assessment can take place on a central, local, or a combination of both levels. It is often possible and even preferable if lower levels than the central one take place where added value in the phase of risk analysis or in the ranking and prioritisation steps showed above could occur.

2.7. Risk Treatment

Having established the relevant contexts and performed the required analysis and assessment of risks, the next stage in the Risk Management Process is to apply the

right treatment, at the right moment and in the right way. The treatment options available are:

– Pass the risk onto others (2.7.1);

– Reduce the risk (2.7.2);

– Cover the risk (2.7.3).

Risk treatment can be defined as 'the process in which the negative impact of the risk on the administrations objectives is neutralised'. Of course, the treatment always has to be carried out in the most efficient and effective way. The way in which the tax administration applies this effect can be put into a work programme, a plan that describes the way several assessed risks will be treated. This work programme can be made on several organisational levels in the administration. Of course, the most detailed one will be set up at local level.

2.7.1. Pass the risk

It may be that another Government department or outside organisation is best placed to deal with the identified risk. An example is the payment risk. Depending on legislation, it may be possible to require a bank guarantee against future tax liabilities. The risk of not paying is therefore transferred from the tax administration to another organisation, in this case a bank. In this way, the passing of risks can be considered in its effect as an ultimate form of risk reducing. However, because the risk still exists, despite being on someone else's plate, they must be considered as a specific form of risk treatment.

2.7.2. Reducing risks

The more risks can be reduced in advance, the less effort is needed after the event. Reducing risks can be seen as a special form of risk coverage. Risk reduction is possible in several steps and in more than one way:

- Limiting opportunities

- Reducing unintentional errors

- Reducing intentional errors

Limiting opportunities
"Make it impossible to make mistakes"

Opportunities to make errors, deliberate or accidental, can be reduced. Reducing to zero means that errors can't be made anymore and thus a risk no longer exists: it is no longer *possible* to make errors. Possible measures are:

- *Amending:* High-risk elements of legislation and regulations can be substituted with elements containing less risks and a better enforceability.

- *Repealing:* By repealing legislation or regulations all the risks are reduced to zero. In addition, the yield from the legislation in terms of money or intended social regulation is ended.

- *Consistency:* Sometimes the same element has different definitions in the different legislation or regulations. By making those elements consistent, the chance of making errors declines.

- Consultation and agreements

  – *with tax consultancy organisations* about the interpretation of the law in specific circumstances or in specific sectors

  – *with organisations in the relevant sectors* about the interpretation of the law in specific circumstances or about valuing of specific elements.

  – *with the individual taxpayer* to give clarity about the fiscal law in specific circumstances.

- *Thresholds:* By introducing a threshold in the legislation or regulation a lot of (mostly small) risks disappear. But on the other hand around the level of threshold new risks appear;

- *Standard allowances:* A standard allowance regularises parts of the legislation with legal assumptions. Through a standard allowance, complexity can be reduced. An example of a standard allowance is the sector studies (Studi di Settore) in Italy.

- *Digitalisation:* By using digital tax return programmes a break of media (transferring data from paper to machine) can be avoided. This not only results in a reduction of input mistakes but also in the avoidance of irritations on the taxpayers' side.

- *Validity checks:* Especially in digital tax return programmes validity checks can be built in. This makes it impossible to make certain mistakes.

- *Authorisations:* The award of the authorisation can be coupled to specific demands, for example to the taxpayers' bookkeeping in a way that it is better auditable.

Reducing unintentional errors
"Make it difficult to make mistakes"

Not all the errors that can be made by the taxpayer are deliberate, they can also be unintentional. That's why the taxpayers must be educated in a certain way and helped by the tax administration. Here the service side of the administration is visible, the helping hand.

- Understandable legislation and tax returns

The more legislation and tax returns are understandable to the taxpayer the less unintentional mistakes he'll make.

- Accessible and understandable supporting information

If explanatory notes accompanying return forms, public notes and leaflets on specific subjects, are easy to obtain, accessible and can be understood, the number of unintentional errors should reduce.

- Information

By using mass media - press, radio and television - thousands of taxpayers can be reached and informed about certain tax issues. The nature of the information channels, advertisement and radio or TV spots, and its costs, will determine what type of messages are directed to taxpayers on major changes and ways how to get more information.

- Easy contacts

The more easy it is to get in contact with the tax administration in a way and at the time the taxpayer prefers, the earlier this will be done and the more likely the taxpayer will be inclined to do so.

– *Internet:* The Internet is accessible 24 hours a day, is easy to update and gives opportunities for general information more or less shaped to the taxpayers' specific needs.

– *Telephone:* The telephone is a medium with a lower threshold for certain groups of taxpayers. Accessibility at times to suit the taxpayer facilitates the use.

– *Client desks:* In the tax office, a taxpayer can get a personal contact with tax officials but access is more restricted by the locality of the office and the availability of staff.

It is obvious that as the intensity and degree of matching with the individual taxpayer's requirements increases so do the costs. It is therefore a matter of efficiency on the tax administration's side to tune the several sorts of information demands to the information channels available.

- Preliminary consultation:

A specific aspect of giving information is called preliminary consultation. Specific because it is not all one-way traffic, but a communication to and from both sides and because of the fact that the consultation takes place before the fiscal event occurs. There is a win-win situation: certainty for the taxpayer, reduced risk for the administration. To provide certainty at an early stage for the taxpayer, the tax administration can offer the possibility of a preliminary consultation where it's point of view is clarified in respect of the fiscal consequences of a forthcoming major event, for example the sale of the company. To avoid tax shopping and competition with tax consultants, the forthcoming event and the way the taxpayer is intending to act must be made fully clear. Openness and trust are the key words. Subject to an adequate use by both taxpayers and tax administration this approach can give an efficient and effective contribution to risk reduction.

- Education

Public notices and leaflets can be seen as education (education as it is meant here sees education in a physical way) sometimes for specific groups, for example start-up businesses. They can be invited for special meetings at the tax office to get information about legislation, tax returns, administrative obligations and specific requirements to their bookkeeping. Also possible is

a visit from the tax administration brought to a new trader with the same objective but now tuned to the specific situation of the taxpayer.

Another special group are school children, the future taxpayers. Education about taxes, their role and function in modern society, the way tax money is used and the effects of fraud can be used in several stages of the school careers. Older students can also be taught to complete tax forms. Whilst the tax administration is not an education department, it is possible to develop educational support packs for use by schools. Other ways are also possible, such as a tax website aimed at children with information and games.

- Helping hand

- *Electronically:* In digital tax return programmes an 'electronic helping hand' can be built in. When using online declarations, hyperlinks can guide the taxpayer trough his return using specific and related information from the tax administration's website.

- *Physically:* Physical help can be provided for example with filling in the tax returns. Yet, in spite of all the electronic services on offer, for some groups of taxpayers, for example elderly people, it is often impossible for them to fill in their tax returns properly. By physically helping them, reduction of errors is surely realised. It is not said that it is always the tax administration that has to give the helping hand. Yes, this can be done by the tax administration itself, but also by other social organisations, for example the unions or organisations for elder people. The tax administration can support those organisations.

- Providing data

The tax administration can provide tax data to taxpayers to help them complete their tax return. A further possibility is that the data held by the tax administration is put on the tax return in advance. This situation requires a very high quality level of data sources.

Reducing intentional errors
"Make it risky to make mistakes"

Not all the mistakes are made unintentionally. Sometimes a taxpayer consciously chooses to falsify his bookkeeping or tax return but he must have the opportunity to do so, one or more reasons for doing this and he has to dare. All these elements can be, more or less, influenced by the tax administration.

- Creating a third party interest

By creating a third party interest, the tax administration can translate the bilateral relationship between itself and the taxpayer into a tripartite relation. Therefore, somebody else is involved who is not under the direct influence of the trader and takes, more or less, responsibilities for a correct tax return of taxpayer. That third party can be an individual citizen, but also an organisation. The relationship can be ad hoc, - or a structural and institutionalised one.

– The citizen as third party

By giving a citizen an interest in a correct invoice, bookkeeping or tax return, in theory an enormous enforcement power can be achieved. In practice, the impact will be much smaller, but nevertheless it is worth using it. The citizens' interest can be a general or a specific one. In the first case, for example, it can be communicated that the less tax other people pay, the more tax 'you' have to pay. In this way, the citizens' interest can be created to ask for an invoice or bill . The objective to be reached lies behind the completeness of the bookkeeping of the salesman. Sometimes there is a more direct interest of the citizen, because the invoice is needed for other purposes, for example to get back money from a health insurer.

– Horizontal supervision

Horizontal supervision is a systematic, non-governmental control pointed to the improvement of the quality of the products and services of taxpayers. Examples are professional codes, certificates, quality marks but also a system of self-regulation within a sector. In case of a strong horizontal supervision, the risks will be (at least in several areas) lower than without such a system. The reasons for horizontal supervision are not always fiscal, but sometimes in the first place based on economic criteria as, for example, market and quality protection.

– Certification

The risk that a return or an account is not reflecting the truth, can be reduced by demanding an (audit) certificate, made by an auditor or another authorised professional. In this way, the responsibility and the duties are passed onto a professional third party (the auditor) and the costs thereof to the taxpayer.

In this effect, horizontal supervision and certification are forms of risk treatment. However, while the treatment is done by others and done before the account or return is delivered, it is classified as a form of risk reducing.

- Reducing reasons for cheating

The reduction of opportunities for unintentional errors is followed by an approach for reducing intentional mistakes for non-compliance. Some taxpayers have no inclination at all to cheat, even though they have the opportunity to do so. These are the taxpayers with a high level of compliance, who are well behaved as far as the tax administration is concerned. However, there is another group of taxpayers who are in a position to cheat and actually have some degree of inclination to do so. There is literature that describes various reasons why a taxpayer who is in a position to cheat, actually wishes to do so. Not all of these reasons can be reduced or influenced by the government as a whole, let alone the tax administration on its own,. However, influencing these elements is influencing the fiscal behaviour of the taxpayer.

– Lack of funds

Taxpayers who have financial difficulties are always looking for sources of income which can alleviate that situation. Tax money is one of the sources. The risks related to this element can be reduced by the principle 'pay as you earn': bringing the moment of levying and collection as close as possible to the moment of earning. Possible opportunities for this are short periods of declaration and collection, and a system of provisional assessment.

Taxpayers with a lack of funds may often have debts outstanding to the tax administration as well. In this way, they make themselves visible to the tax administration in a way of treatment as shown above. But having tax debts can also lead to a higher chance of attention in a repressive way.

– The wish to remain competitive

In some sectors, it is more common to cheat than in others. In a certain way, an individual taxpayer can be pressured, socially or economically, to cheat as well. He doesn't want to be priced out of the market. This element can be tackled only by a sectoral approach. In this way, taxpayers in the same sectors and region are treated as equally as possible, in a preventive and repressive way as well. In this way, fairer competition is guaranteed.

– Greed

Greed is one element which is difficult to reduce. It is said that communication about taxes can make a difference. Is tax seen as a way of 'governmental theft' or as a 'contribution to society'? The more the second belief has the upper hand, the less greed will appear.

– Dissatisfaction with certain rules

Where there is dissatisfaction with certain provisions of the prevailing tax legislation which are felt to be particularly unreasonable, for example, this will be public knowledge. It is therefore possible to opt, either not to introduce that legislation, or to amend it. The last is also possible when the legislation already is introduced. In that case, also possibilities of repressive treatment exist. The knowledge of dissatisfaction makes it possible to trace where the risk of errors will be greatest, among which groups of taxpayers or taxpayer profiles.

– Dissatisfaction with the use made of public funds

This dissatisfaction can only in a small way be reduced by the tax administration. Making sure that the administration is an efficient and effective institute is real in the eyes of taxpayers, is one of the few measures that can be taken.

– Feeling aggrieved ('I'll soon be the only one still paying')

It is an illusion for taxpayers to think they are the only ones who obey the rules and pay their taxes. In fact, most of the taxpayers keep to most of the rules. The misconception of some taxpayers can be combated with communication. Communicate that most customers obey the rules. Research

has shown that people are inclined to conform to the majority view and behaviour.

    – Dissatisfaction with treatment by the Tax Administration.

Taxpayers can be dissatisfied with the general approach of the tax administration. Communication about this approach can reduce this dissatisfaction. But individual taxpayers may also be dissatisfied with how they have been treated by the tax administration. This could be for a wide variety of reasons: not being able to contact staff, unreadable correspondence, delays in dealing with correspondence, mistakes, discourteous treatment from staff, etc. The tax administration can and must hold itself accountable for all of these things, and must pay constant attention to improving them.

- Increase perceived probability of detection

Taxpayers who do have both the opportunity and the will to cheat may nevertheless not necessarily do so. They also have to dare to do it. Some in this group will not take the opportunity, because they think the risk of being caught is too high, and they are scared of the consequences – the penalties. What these taxpayers are doing is making their own risk analysis: the area of the perceived probability of detection. That is the likelihood as the taxpayer sees it, that any infringement will be detected and punished. In combination with the severity of the penalty (fines or imprisonment), the likelihood of being caught is essential in taxpayers' deliberations. It is always a combination of these two factors. Taxpayers deliberate on the basis of what they hear, for example from others, what they observe about how their own tax affairs are dealt with (visibility of controls) and what they absorb from the media. The outcome of their deliberations is a strictly personal matter, because it depends on the taxpayers' personal make-up and situation.

Making sure the actual likelihood of detection is fairly high can increase the perceived probability of detection in the first place. Taxpayers not only must 'feel' it, but also have the perception of it. That is why communicating the strategy, approaches, tactics and results are needed.

Communication in this area is referred to as enforcement communication, which basically means that it is focused on reducing deliberate errors. This communication can take place on a large-scale, for example using national daily newspapers. Not only by key officers of the tax administration giving interviews, but also by balanced press releases and annual reports. Information in general but also specific, for example, an announcement in advance on which parts of the tax return the tax administration is going to focus on. A more specific application of this is the announcement to a taxpayer that *there may* be an audit, with advanced warning and so giving the taxpayer a chance to make a positive change to the tax return.

It has also been shown that a significant effect can be achieved by communicating 'prescriptive norms' (*'failing to declare is prohibited'*) and 'descriptive norms' (*'large numbers of taxpayers have already fallen into line'*): a stimulus to join the majority. The communication may target the whole taxpaying population, but also a small group of taxpayers. In the latter

case, it is better to use other ways of communication, for example direct mail.

Enforcement communication is still unexplored territory in parts, but it does have prospects in that it allows the tax administration to achieve a significant effect at a relatively low cost. More has to be learned about the relationship between the message and its effect. It is only then that this will become a usable element in the process of risk management.

Communications that aim to influence perception on the probability of detection shows the other face of the tax administration. There will be times when it is not transparent, it does not show its hand, and it deliberately creates uncertainty. This contrasts with the situation in the paragraph 2.7 with service provision being characterised by openness, certainty, accessibility and an accommodating attitude.

These are the two faces of an Administration, the friendly and the frightening one.

2.7.3. *Risk covering*

After all these measures are taken, the tax administration is left with those who are in a position to cheat, consciously wish to do so and deliberately take the risk. Here there is only one option, and that is to use repressive control measures and take action against offenders. The sooner risks are analysed and detected, the sooner they can be covered. Risk covering, tackling the expected non-compliance, results in the rectification of the damage if the risk really has occurred. Rectification can take place in money terms by a new assessment to pay the evaded tax and a penalty, but in some cases other penalties are possible such as imprisonment. Carried out in a correct way, repressive activity as risk covering also has a deterrent effect. Not only on the behaviour of the individual taxpayer but, via his social and commercial network, on other taxpayers. After all a common characteristic of risk covering is that, except in case of undercover activities, the taxpayer knows that he is being treated. He 'experiences' the tax administration.

However, there are many ways to cover risks and to interact with the taxpayer. Ways which differ not only in degree of depth but also in capacity, are needed. Using a risk covering measure doesn't mean that all the risks are covered. Some of them can be accepted, for example because of their small financial consequence. For reasons of efficiency and effectiveness, the measures of risk covering must be in balance to the extent of the risk and/or of the cost to taxpayer. This is called the principle of proportionality. But it should be noted that the possible use of the above mentioned measures of course always depends on the existing specific legal circumstances or a political imperative.

- Contact by paper

However, contact by paper can be made on various occasions and with various intentions, in this chapter contact on paper has to be seen in the context of risk covering. The intention of this contact can be questions of clarification or questions to complete information on the tax return.

Sometimes a standard questionnaire can be developed and used. Depending on the answer the conclusion can be that the supposed risk did not occur or that it still exists. In the latter case, follow-up activity is needed.

A specific form of paper contact is that in which answers, decisions and the like are communicated with the taxpayer. Most of the time this can be seen as the final stage of the risk-covering phase. The way of communicating with the taxpayer is the 'business card' of the tax administration and contributory to its image. Therefore, it cannot be emphasised enough that attention has to be paid to the form and content in terms of speed, quality and comprehension.

- Contact by telephone

By comparison with the paper contact, contact by telephone interferes more in the private domain of the taxpayer. Not only the moment of contact but also the moment of answering is set by the tax administration. The reasons for and results of contact by telephone are identical with those mentioned under contact by paper. Additionally, requirements can be made about the way in which telephone calls are made. Sometimes specific training of staff on this subject is required.

- On site visits

On site visits are those made to certain taxpayers during their business hours with the aim of collecting information with the intention of using it during treatment in the future. The object of the visit can be to:

– identify the number of employees working at that moment

– who they are;

– the cash balance;

– the existence of specific parts of administration, for example agenda's;

– the level of business activity;

– the prices actually charged;

– the dimensions, content and composition of the product(s). This specific aspect is also called test purchasing.

An on-site visit can be done announced or unannounced, visible or undercover. The choice is a tactical one depending on aspects such as legal powers, safety risks, image of the tax administration, the sort of information to be collected and the extent of the (fiscal) risk(s). The overt nature of announcements of site visits, that 'there is a chance that you may be visited in the next two months', may have a substantial preventive effect and a change in behaviour.

- Invitation for voluntary disclosure

When a taxpayer is selected for a more intensive form of risk coverage, like a desk audit, it is possible to invite the taxpayer to make a voluntary adjustment to his tax return. In return for this, the penalty can be reduced or eliminated. In a way it looks like this is a method of risk reduction, but in

this case the tax return is already filed and the taxpayer selected for intervention and in the picture. It is not possible to reduce the risk of fire when the house is already burning! Attention has to be paid to the way in which this measure is implemented, and the words used in the invitation are a key factor for successful results.

- Partial desk test

A partial desk test is a treatment done in the tax office in which one or more specific risks of the tax return are covered 'from behind the desk'. Contact with the taxpayer is possible during the test. The test is done by confronting the pointed risk area with available information and the interpretation of law and regulations.

- Complete desk test

A complete desk test only differs from the partial one because in this case the tax return as a whole is treated.

- Desk audit

In this digital era the taxpayers use computers more and more for their bookkeeping. This offers the tax administration prospects to ask the taxpayer to send in his accounts to the local office. Here the analysis of the records can take place. A desk audit can be followed by a partial or full audit, for example, if access to underlying papers is needed. Also the choice can be made to finish the desk audit in the office by asking the taxpayer to send in the absent papers. In that case, some elements of the audit could be carried out by lower qualified staff.

- Partial audit

A partial audit is from the beginning limited to one or more specific risks. The audit will normally not expand to other areas except when it is obviously necessary. In contrast with the desk test an audit is pointed to the administration and bookkeeping of the taxpayer. Normally the audit covers a specific period, often the most current. But when a mistake is found, the audit can also be extended to previous periods . The taxpayer is informed in advance about the limitations of the audits, thus eliminating negative effects from not finding potential errors in other than the covered areas.

Normally the audit is carried out on the business premises and not in the tax office. In this way not only are all the required administration and information available but also it is possible to 'hear, feel, see and smell' the taxpayer's business.

- Complete audit

A complete audit only differs from the partial one because in this case the business as a whole is the object of the audit. Risk assessment supports the tax official in making decisions in which areas deeper investigations are needed.

Audits can be started announced or unannounced. Normally an audit will be announced. But sometimes the choice for an unannounced audit is clear. For example due to the risk that in case of announcement crucial parts of the bookkeeping will be destroyed.

The tax official has to understand the entity and its environment. He has to determine the components of the assessed risk. For this determination the tax official can make use of statistical techniques and/or IT-support. In complex situations the audit can be carried out by a team containing several specialists, for example on EDP, statistics and legislation.

- Criminal investigation

The most intensive treatment of a taxpayer is a criminal investigation. In this situation he is no longer a taxpayer but a suspect and will have specific rights and obligations. The aim of the investigation is to collect evidence for a criminal court case. Because of the nature and the specific applicable legislation, these investigations will be carried out by specialists.

- Specific activities

– Campaigns

Sometimes it is more efficient and effective to combine the treatment of a specific risk or set of risks into a (nation wide) campaign. Best practice is ring mastered and the campaign, which can be supported by media and press attention, profits in the area of behaviour change that can be realised. Whilst campaigns require extra investment in organisation and time, the effect will be higher than the sum of the individual treatments. Campaigns are intended to have a high impact on the risks and the taxpayers concerned.

– Projects

Projects are comparable to campaigns. The main difference is that a project is particularly internally focussed and not externally communicated. For example in case of the treatment of complex risks a project can be set up to support the tax officials in an efficient way with specialist know how. They often lack the impact of a campaign. Another example is a pilot programme which looks at trialing alternative approaches to formally tried and tested means in case there are benefits that have been missed in the past in terms of more efficient and greater coverage of a population that meets the risk criteria.

Projects can be further sub-divided. Test drilling operations are undertaken to identify the extent to which a particular risk extends into a given group of taxpayers. Taxpayers are selected at random from amongst a chosen population so as not to skew the results.

– Multi agency treatment

Sometimes risk sharing is possible as the risk or the (group of) taxpayer(s) have more legal connections than the fiscal one and it is not only a matter of fiscal non-compliance. Also, the combination of several small risks

occurring in the different departments can make a huge risk for society. In close cooperation with other Government departments or local councils, the risk(s) can be treated.

2.7.4. *Timing and quality of the intervention*

Some tax risks can and should be addressed prior to acceptance of a taxpayer onto the tax system. However, most risks only materialise once registration has been affected so analysis and treatment can only take place post registration.

Not only is the form of treatment important but also the timing. In fact, the combination of both must be right to get a maximum result. Yet the timing of the treatment not only depends on the timing of the detection of the risk, but proper timing of the treatment after detection of the risk is also needed. Depending on the character of the risk, whether it is structural or incidental, action has to be taken at the correct moment. This, especially in the case of incidental risks, is because the longer the delay the higher the risk that the tax has disappeared or cannot be collected.

However, there is another element, the element of education. The longer the time between making an error and its discovery, the less the penalty will lead to a change of behaviour. The taxpayer won't relate his misbehaviour to the penalty anymore. The maximum effect is reached of course with a 'caught in the act', but the fiscal possibilities here are limited. An 'on site visit' is one of them. But the situation of a ' caught in the act' can be approached by an adequate organisation of the risk identification, analysis, assessment and treatment.

Not only the timing but also the quality of the treatment is contributory to the ultimate effect on the risk chain. It is obvious that the result of a well identified, analysed and assessed but poorly treated risk will be poor as well. Not only is the energy put in at the early stages spoiled, but also the intended effect is not achieved and in some cases the situation made even worse. The taxpayer will persist in non-compliance and there is a big chance that his behaviour will deteriorate: 'after all the taxman fails to notice it anyway'. The quality aspect will be addressed in chapter 2.8 (evaluation).

The result of the phase of risk treatment is an answer on the risk question. The answer can be a lower risk level as a result of the undertaken risk reduction measures. In case of risk covering the answer may be that the risk did not occur. But also that it occurred and non-compliant behaviour had to be redressed with a correction (sometimes including a penalty) on the tax return. These results give rise to the next stage of the process, the evaluation.

However, risk covering also results in notes, conclusions in files set up during the treatment. These files can be used for quality control purposes and as a part of a learning circle focussed on an increasingly better treatment and a treatment which is constantly tuned to changes on the taxpayers' part.

2.8. Evaluation

2.8.1. Performance measurement

An old adage says that you can't manage what you can't measure. For tax administrations performance measurement can take place at different levels. The first level would be to measure the effectiveness of each step in the Risk Management process by asking relatively simple and straightforward questions: were the right risks identified, were they correctly analysed, was the right form of treatment chosen, etc. At the second level the Risk Management process as a whole is evaluated, by examining how and to what extent the application of the process contributed to the achievement of the tax administration's objectives. Finally, the evaluation can help to ascertain the effectiveness of the organisation itself in how it deals with risks. Is the tax administration itself, capable of effectively dealing with the identified risks, or does it need more or different resources?

The starting point for each performance measurement can be the basic model shown below. Measurement should take place in each step but through different means and indicators.
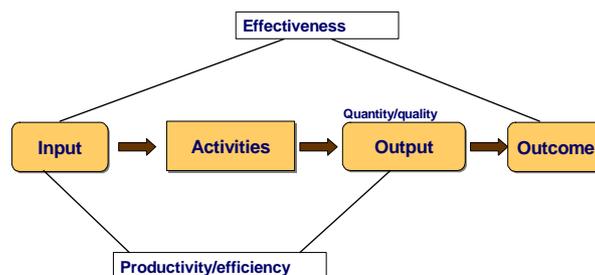
Input is the resources consumed to produce the outputs. They can be described in financial terms like costs or in physical terms like work hours.

Activities are the basic steps of the process where input is transformed to output (e.g. analyses, defining risk treatment options, every activity undertaken by the tax administration to achieve its objectives).

Output is what is produced (e g number and quality of audits, number of reassessments or collected revenue, other measures taken to reduce risk). The evaluation should not focus on output alone. Nowadays outcome measurement is gaining popularity. A completed audit is regarded as output but the higher level of compliance is regarded as the outcome..

Outcome (Impact or effect) The purpose of the activities is normally to achieve something (e g changed behaviour) besides the direct output which is the desired long-term goal like improved compliance.

Productivity (or efficiency) is the relation between input and output. It is traditionally expressed as number of units produced per hour (or other time measurement). It can also be seen as the relation between actual productivity and the optimum productivity (based on benchmarking analysis). It should be noted that for tax administrations to measure the productivity and efficiency of the overall process is complex.

Effectiveness is the relation between input and outcomes. Reliable measures of effectiveness are highly desirable, but often difficult to find. It is possible to measure outcomes but it is not easy to relate a specific outcome to a specific activity or input. Because measuring outcome is the most difficult and important part of the evaluation, some methods will be described below.

2.8.2. *Measuring outcome*

Output must not be an indicator of outcome. Even if a large number of activities (e g audits) have been carried out, it is not certain that this will have a positive impact on the compliance level. When the number of audits is the output indicator, it is equally important that the right taxpayers are selected for the audit and that the audits are carried out correctly. It is only by measuring the real effects such as those on the tax gap, compliance levels, etc, that the tax administration will know that it is successful.

Final outcomes as well as partial outcomes can be measured. The final goal and effect could be to reduce the tax gap. This should be accomplished by increasing the level of voluntary compliance. The level of voluntary compliance is influenced by a lot of different factors. It is, for instance, important that the taxpayer has confidence in the tax system and in the tax authority. The taxpayer should also perceive a risk of detection. The taxpayer is very much influenced by what other taxpayers do and think. It is also important that it is easy to comply. All these different factors should be considered.

A lot of different methods can be used to measure the outcome. It is the combined result of the different methods that can give a reasonable accurate picture of the achieved outcome.

These are some possible methods:

– *Taxpayer surveys* can be used to measure taxpayer confidence (in the tax system and in the tax administration), perceived risk of detection and attitudes (social norms).

  – Analysing auditing methods:

  • Audit through random selection can be used as an effective tool to measure the size of the "tax gap" within specific areas. A small sample is selected randomly within a larger group of taxpayers. The purpose can be to measure the number and size of all the both intentional and unintentional errors.

  • It may be preferable to choose a specific item or specific risk area to audit, e g different deductions, capital gains, items on the balance sheet or specific problems with VAT as this requires a smaller sample and provides a more accurate result. The results of random audits are always influenced by the skill and commitment of the auditors. The results are therefore not always reliable. In order to make the result more reliable is it normally better to focus on one specific item (instead of the whole tax return) and to concentrate the work to a limited number of tax officials.

- The measurement can also focus only on number of errors (and not amount) because this requires a smaller sample. The same risk area or item should be audited every year (or every second year). The changes in the number of errors are an indicator of the effect.

- The number of obvious mistakes in the tax returns can be measured by selection systems. Often the selection systems only select an appropriate workload. This means that available resources constrain the number of tax returns that can be altered (even when it comes to obvious mistakes like calculation mistakes) by the use of threshold values.

– Changes in tax returns can be followed from year to year. It is then possible to detect unexpected changes (e g the number of a particular deduction increase or the turnover in a specific trade sector decrease).

– The use of comparative groups can be of value when measuring the effect of a specific treatment or the effect within a specific group of taxpayers. The proportion of taxpayers claiming a certain deduction after service/education or audit can be compared with a group who has not been educated or audited at all. It is also possible to compare changes in total tax paid within a group that have been subject to some sort of treatment with a control group that have not been subject to the same kind of treatment.

An example about the "difference of the difference"
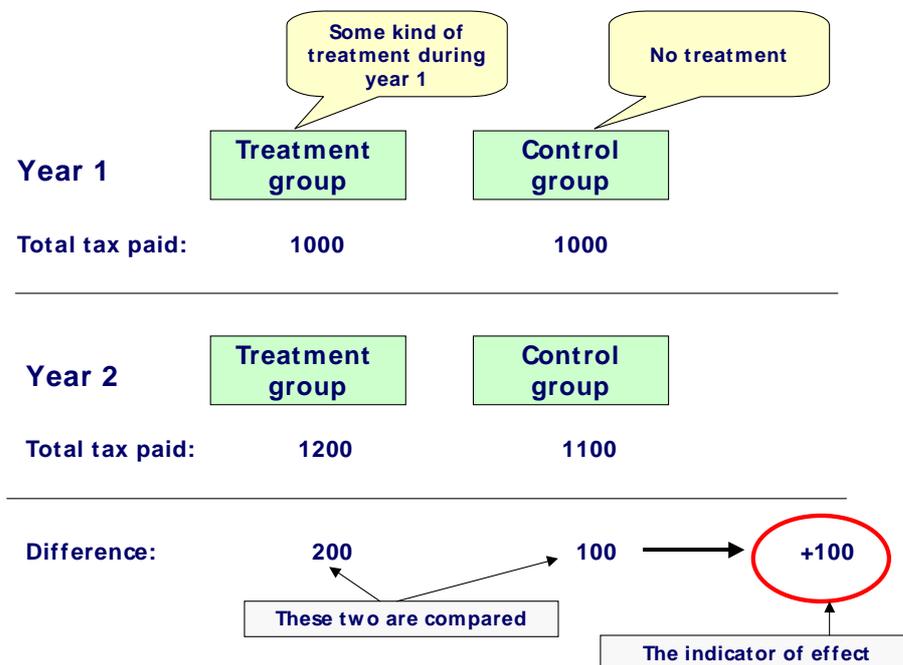
Evaluation can be done by using an experimental design that involves the creation of two essentially identical groups through random assignment; one group (the treatment group) receiving some kind of treatment while the other

(the control group) receiving all other influences except the special treatment.

The effect can be established by comparing the two groups both before and after exposure to a treatment. Both groups will change from one year to another but it is not this change (from year 1 to year 2) that is the indicator of the effect, it is the difference between the changes that is the indicator.

In this case is it not the direct effect during year 1 (when the treatment is being applied) that is being measured, it is the impact on future behaviour that is being measured. It is also possible to use a quasi-experimental design that does not involve a random assignment between treatment and control groups. Rather, a quasi-control group may be constructed to match as closely as possible the participants in a treatment group.

In the example above, total tax paid is used as a measurement. But a lot of different measurements are of course possible to use, e g declared income, claimed deduction, turnover, different key ratios and others.

All of the methods above should be used and together they can give some information about the achieved outcomes. This means that it is difficult to measure the outcomes of one sort of activity, e g audits. Instead, the measured result is the combined effect of all activities.

2.8.3. Feedback

The information that is obtained from the evaluation process will serve as feedback for the steps of the Risk Management process as well as the process itself. The risk analysis and risk assessment should be updated based on new information and knowledge.

As an important step in the risk management process we have to take into account that the measurement of outcomes can only be done afterwards which means that it is not possible to know if we are on track while the activities are being carried out. Sometimes, it can take one or two years before we know if the activities have had some form of impact. This does not, however, mean that we should not do any form of follow-up or monitoring during implementation of different activities. During implementation, it is possible to measure output and this should be done continuously.

C. ORGANISATIONAL FACTORS

2.9. Human resources

The quality of the treatment is based on an adequate assessment of risks, choice of the treatment form and the time of action. But the results of the treatment depend also or even more on the skills and competences of the tax official in undertaking the treatment in an efficient and effective way. Therefore, attention has to be paid to the skills and competences of tax officials.

2.9.1. Recruitment and selection

Every tax administration wants to have proper insight into its workforce composition and personnel structure, and into its short-term and medium-term needs. Therefore, the tax administration needs to have a set of tools to help guide the recruitment and selection process.

Dealing with risk management also means that different kinds of competences are required, for example statistics, IT- EDP- and communications.

2.9.2. Skills and competences

A competence-based human resources system is rooted in the idea that good performance will result from having the right people, in the right jobs, at the right time, with the right skills and abilities.

More specifically, staff engaged in risk treatment is expected to have the following competences:

- effective interactive communication;
- appropriate level of service-mindedness
- writing and reporting skills;
- appropriate level of confidence;
- (basic) analytical skills;
- knowledge of principles of good governance;
- knowledge of legislation, policies and procedures;
- knowledge of auditing (specially auditors);
- knowledge of office technology; and
- knowledge of supporting Tax Administration values.

Each competence has associated levels of proficiency, or a scale, that generally lays out a behaviour pattern for each level: e.g. expert capability, in-depth knowledge and capability; solid capability and good working knowledge; basic capability; or basic awareness.

Skills and competences are not only the tax administrations' concern but also that of the individual employee. The importance of training should not be underestimated.

2.9.3. Support

Another element which plays a role in well-treated risks is the possibility of support during the treatment. This makes the treatment more effective. There are a lot of possibilities of support, varying from joint-audits via just in time specialist support, to support with (risk related) audit manuals and audit automation.

2.10. Managing the process

It is often said that the risk management chain is as strong as its weakest link. At the same time the risk management process is not a 'perpetuum mobile': is doesn't start nor keeps moving on its own. Above that things have to be organised, resources made available and assurance has to be achieved about the quality of the several parts of the process. This is the management component of the process, a very important component, present in all the organisational levels.

This component not only is complementary to every phase of the process but also in the relations between them. Because of differences in the legal, organisational and geographical situation in the various member states, it is impossible to outline the management component in detail. It would cross the border of this Guide, which is focussed on the risk management process.

The management task is to 'get the right things done, at the right time, in the right way' by initiating, organising, controlling and not at least by communicating. A consistent message repeated as many times as needed is essential for the result in the end. For the content of that message, material from this Guide can be used.

2.11. Impact on the Administration

Risk-oriented working does not just mean a different relationship with the relevant environment around the tax administration. It also has consequences for the internal work process, and the people involved in it, the staff.

At the same time, staff commitment is an important factor in the successful implementation of risk-oriented working. There can be identified several shifts or changes in the way towards risk-oriented working. Staff may view these shifts as either positive or negative. Management need to realise how the staff experience these things. Vision, good communications, openness and consistent messages are all necessary to build up acceptance of the change process among staff.

It is also important for the management to support the changes and reflect that consistently. Consistency requires a vision, not only a vision on risk management but also on its effects, external and internal. A vision also carried by the management.

'Shifts' from... to...

- *From directly influencing the risks to be dealt with, to an indirect influence:* Before, intervention staff decided for themselves which taxpayers they would deal with and which areas would be considered. Risk-oriented working means that other people will be deciding this. Of course they are all colleagues, but still...

- *From dealing with everything, to dealing with matters decided on in advance:* Before, intervention staff could deal with everything themselves if they thought it was expedient or they enjoyed doing it. Now, the areas they need to look at will be laid down in advance, and often they will also be given an estimate of the degree of correction required and the level of resource to be used.

- *From dealing with both easy and hard jobs, to more hard jobs:* Before, intervention staff were presented with a mixture of easy and difficult jobs. After dealing with a difficult job, they could choose a few straightforward things to do and make a good bit of progress while taking it easy for a while. With risk-oriented working, in effect they will be given more difficult jobs to do.

- *From operating inside a black box, to working in a transparent environment:* Before, each staff member worked inside a black box; in fact they *were* a black box. What went on inside the black box was not visible to the management. Management was not really concerned with this. Risk-oriented working implies a completely transparent choice process. In this process, the transparency is in the choices (by management) and in the implementation of the choices (by staff) in terms of revenue and time spent.

- *From implicit to explicit:* Before, risk-oriented working did happen, but a lot of things were not made explicit. As a result, it was not always clear afterwards why certain parts of a certain item had been looked at, and how the quality of the work compared to the time spent. Risk-oriented working requires everything to be made explicit. It must be made explicit why a certain item needs to be dealt with, what risks are present in relation to that item, what the financial importance is, and what the estimated time needed to deal with it is. Making things explicit can make some vulnerable, because it may be apparent afterwards that the judgement was incorrect. However, making things explicit makes it possible to learn.

- *From freedom to freedom with restraint:* Risk-oriented working can sometimes give a feeling of lost freedom. It is important to emphasise that the freedom is still there, but it takes a different shape. It is still there in the possibility of bringing up risks, selecting items and weighing up the risks. Yet it also means accepting that other people, colleagues, can make choices. Trusting the judgement of colleagues is often a competency requiring further development.

- *From working your way through the pile, to 'just in time'*: Everyone is familiar with the sight of cupboards bulging with work in progress and the awkward jobs that always get left on the pile. Experience also shows that bulging cupboards make people feel that they are under a lot of pressure at work. Risk-oriented working implies a just-in-time system for delivering new risks. There should not be more work in the in-tray than there is room for.

- *From judging people on numbers to learning from content:* Before, staff was judged on the number of things they dealt with, how many jobs got finished. Risk-oriented working moves away from this. Numbers are no longer sacred, it's the content:

  – What risks were dealt with,

  – What were the outcomes,

  – Why were certain risks dealt with and others not,

  – How are the risks developing,

  – What choices were made.

  In short, a transparent process that gives an insight into what is going on. Accepting this means adopting a learning culture instead of a judging culture. Instead of judging what happened yesterday, we learn for tomorrow.

- *From drifting to guiding:* Before, as a manager one had little or nothing to do with the specialist content of the work or with substantive guidance on the primary process of levying taxes and auditing. At management level in particular, risk-oriented working makes it possible to guide staff. It sounds good, but it does imply the courage to make choices, to decide *not* to deal with certain risks, and therefore not to generate that additional revenue. The process of choice is also transparent, which makes a manager vulnerable. However, it also allows the manager to take responsibility and account for his actions.

- *From general to specific competencies:* Before, someone was an all-rounder as a staff member – knowing something about everything and deployable anywhere. Risk-oriented working can mean that some competencies are more necessary than others. It makes it clear which risks must be dealt with, and what special knowledge, if any, is needed for this. That knowledge may not be there, or not sufficiently, in which case training will be needed on a specific area. There may also be some risks that can only be dealt with by a small number of staff – the specialists.

These ten shifts are a non-exhaustive, value-free summary, which is merely intended to offer some insight into the 'soft' side, the human effects of risk-oriented working. Knowledge of these shifts and the way in which they are welcomed or resisted by staff is essential to make a success of risk-oriented working, as managers and as an organisation.

2.12. Corporate Governance – Addressing Internal Risk

Earlier chapters focussed on the risks that taxpayers present to the tax administration in the collection of taxes. This chapter will address internal risks faced by the tax administration.

At a strategic level, risk management is used to protect the tax administration's reputation, and safeguard accounting for public funds. At an operational level, effective risk management ensures delivery of major projects and programmes provides early warning of potential problems and/or identifies potential opportunities.

All staff and particularly managers should identify, understand and manage risks, and develop an appreciation of which risks can be tolerated and which risks cannot.

Both internal and external risks need to be addressed in some way. External risks concern everything outside the tax administration and internal risks concern everything within it.

Internal risks can be divided into three different categories as follows (with a few examples):

(1)   The risk management process does not work as it should

– Severe risks not identified

– Wrong treatment applied

– Low quality or productivity

(2)   Internal organisation and systems not working

– Failure in IT support

– Internal communications break down

– Bad organisation or leadership

(3)   Incorrect behaviour from staff

– Corruption

– Fraud

– Bad attitude towards taxpayers.

A holistic view is imperative in order to successfully reach the objectives. Most problems are related to both internal and external risks and have more than one cause. Moreover, most causes are related to several problems.

The risk management process in itself will not be different if it is used for external risks, internal risks or both. Everything in this Guide is applicable to all three possibilities. The important thing is that all risks or problems are covered in some way and that it is done with a holistic approach. Each tax administration has to decide which tools and mechanisms that should be used for different kinds of risks.

Integrated risk management, covering both internal and external risks, is about dealing with risks from an organisation-wide perspective. Everything is about reaching the objectives of the tax administration regardless of whether the risks are internal or external.

An integrated risk management process is fully integrated with the normal planning and decision processes.

Integrated risk management is different from the perspective of some observers who view risk management as something added to the tax administration's activities and thus represents a burden. Even if integrated risk management requires an effort it is intertwined with a tax administration's operating activities. Integrated risk management is most effective when these mechanisms are built into the tax administration's infrastructure.

PART 3 – Examples

3. INTRODUCTION

Interesting as the theoretical approaches to Risk Management may be, finally it comes down to how it is applied in practice, or as we may say: 'the proof of the pudding is in the eating'.

This part will illustrate the theory by examples, gathered from the experiences in the different tax administrations, and categorised according to the theoretical model. It in no way pretends to be complete and the choices for publication here may sometimes be arbitrary. It is the intention though, to keep this as a dynamic collection of experiences when the actions of tax administrations were guided by the Risk Management process model.

3.1. Examples for chapter 2.4 – Strategy

3.1.1. Audit Strategies

<u>Sweden</u>

4 different audit strategies
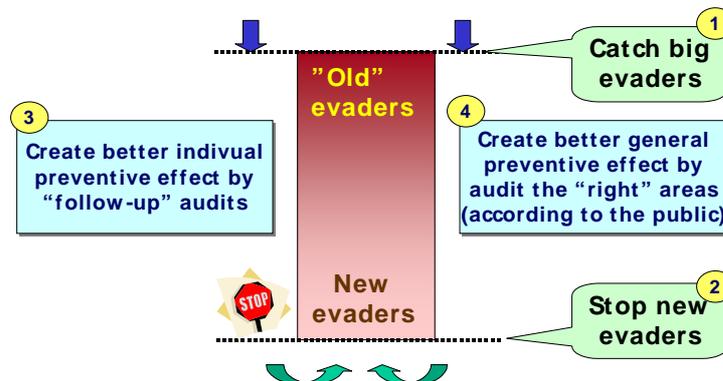
The strategies are based on the assumption (according to experience and theory) that new evaders tend to start evade on a small scale and then escalate as times goes by if the evasion is successful. Those that evade on a bigger scale tend to have been evading for a while.

The first strategy is to catch the big evaders that are going for the big money.

The second strategy is to prevent new evaders from becoming "old" evaders. This means that first-timers (new businesses, young people) should be audited even if the potential evaded amount is small.

The third strategy is about creating a better individual preventive effect by doing follow-up audits. This means taxpayers that have been audited in the past (and found to evade) are audited again. This strategy must be communicated to the taxpayers in order to work. The idea is that an audited

taxpayer will be more inclined to changes his behaviour if he knows that one detection will lead to a bigger risk of being audited in the future.

The fourth strategy is about creating better general preventive effect by auditing the "right" areas according to the public. For example, targeting those taxpayers who are evading taxes whilst claiming social benefits. These should be audits that will get some positive attention in the media. The number of audits does not have to be great but they should focus on areas where the public finds the tax evasion unjustified and negative for the trust in the tax system, the 'high outrage factor'.

3.1.2. *Convention between the Minister of Finance and the Revenue Agency*

<u>Italy</u>

The Minister of the Economy and Finance and the Revenue Agency stipulate every year a Convention in which the goals of the Agency are fixed and the relevant financial resources are assigned. The Convention is valid for a three-year period, updated every financial year.

The Convention 2005-2007 sets up the strategic planning as follows:

(1)   Promotion of effectiveness in activities relevant to prevention and fight against tax evasion.

The purpose is to increase the number of controls on taxpayers ensuring:

- proper number of fiscal audits on large companies but also on other taxpayers
- examinations on the spot in order to check taxpayers' compliance
- general controls of tax-returns
- reduction of legal cases.

(2)   Higher level of services provided to taxpayers and community.

The purposes are:
- to increase the level of voluntary compliance
- to improve collection of taxes
- to ameliorate relationships between the Revenue Agency and the taxpayers
- to enhance the implementation of tax laws, also at international level.

(3)   Evolution of organisational models and more efficient use of resources.

The purposes are:

- to promote the innovation of the organisational schemes at any level
- to develop new personnel management procedures

to improve the communication between the Revenue Agency and the community.

3.2. Examples for chapter 2.5 – Risk identification

3.2.1. Attention category

<u>The Netherlands</u>

The attention category is an estimation of the compliance level and importance of an individual company. In other words: fiscal risk and fiscal importance, each divided in 'high', 'medium' and 'low'. The nine categories are completed with two special ones: business start-ups (too little is known about them to place them in the right category) and a special category for traders actually under criminal prosecution (predominance of the fraud element). Eleven different attention categories have been identified on the basis of objective criteria. Every company, except the thousand largest ones has an attention category.

Fiscal importance						
High		1A	1C	1D		
Medium	B	2A	2C	2D	E	
Low		3A	3C	3D		
		A	C	D		
		Low	Medium	High	**Fiscal risk**	

The **fiscal risk** class is based on 13 criteria:

(1)   Business start-up Y/N

(2)   Sector risk

(3)   Tax complexity related to the number of companies in the entity

(4)   Tax conduct (income and corporation tax). The percentage of the indicated income and corporation tax amount owing is collected via provisional tax assessment in the tax year itself.

(5)   Regularity of returns for all taxes over the last twelve months.

(6)   Official assessments in the last completed year

(7)   Supplementary payment of VAT in the last calendar year.

(8)   Quality of administration

(9)   Substantive material corrections of the tax return in the last five years

(10)   Fiscal-technical corrections in the last five years

(11)   Fraud

(12)   Regularity of payment (irrespective of resource)

(13)   Preliminary consultation

Every criterion results in a score. The sum of the scores qualifies the company for a low, medium or high-risk level rating. The higher the score, the higher the rating.

The fiscal importance is based on the annual declarations made for the four major sorts of taxes: Corporation tax, Income Tax, VAT and Wage Tax. The sum of the declarations qualifies the company for a low, medium or high importance rating. The higher the result, the higher the rating.

The determination of the attention category is fully automated. Moreover, almost every question is automatically answered. Twice a year the attention category is updated by answering all the questions with the latest information.

3.2.2.   National Risk Database

The Netherlands

The National Risk Database (RDB) is a computerised method for recording and considering risks in the fiscal process. The RDB application is available for all staff members of the tax administration. In the RDB the whole 'lifecycle' of a risk is recorded.

Every tax official can record a new risk in the RDB. Details include:
– the name of the risk;
– description of the risk;
– legislation related to the risk;
– the nature of the risk;
– how the official found out about the risk;
– are there any indications that this risk often occurs;
– in which sector is the risk detected; is there any information about gravity and financial importance of the risk;
– which way is the best to detect the risk;
– which way is the best to cover the risk.

The national risk organisation improves every new risk signal. Improvement in a way that:
– the description is understandable and complete;

– ensures it really is a new risk and that it isn't already recorded, under another name, in the database;

– the new risk is described in a structured and unambiguous way;

– describes how risk detection can take place, its sources and moment;

– a possible selection rule is developed;

In case preliminary investigations (audits or desk tests) are needed, the participating tax offices are recorded in the RDB just as the results of the investigations in terms of:

– the percentage of returns selected: the tax returns which are identified by the selection rule as a percentage of all the tax returns;

– efficiency: in how many selected tax returns the risk occurred and was corrected;

– effectiveness: which part of the corrected tax returns was covered by the selection rule;

– the financial importance of the risk;

– the needed treatment capacity in hours;

– the definitive selection rule and parameters;

After the introduction of the risk, the results of coverage are recorded in RDB in almost the same terms as used during the phase of the preliminary investigations.

Every tax official can consult the risk database at any moment to see if a certain risk already is recorded, as well as which risks are recorded in the base. The information on the preliminary investigations results and those of the risk coverage is classified and only accessible for a few members of the national risk organisation.

3.2.3. Measuring the tax gap

<u>Sweden</u>

There is a gap between the amount of tax that should be paid according to the law (theoretical tax) and the amount that is actually debited. This is called the tax gap. The tax gap consists of tax evasion and unintentional errors made by the taxpayer or the tax authority. This element is known as the declaration gap. Taxes that are debited and not paid are referred to as collection losses. The figure below explains the tax gap.
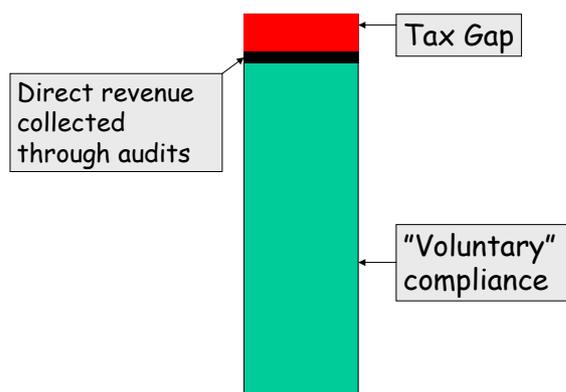
The total pillar represents the theoretical correct tax. The green part represents voluntary paid taxes, which are taxes paid before any audit or inspection activities. The black part represents extra revenue collected through audits. The rest is the tax gap, the revenue lost due to intentional and unintentional errors, or unpaid taxes.

Measuring the extent of tax evasion and the tax gap is, for obvious reasons, very difficult. The methods available may be divided into direct and indirect methods. Direct methods are based on surveys or interviews with randomly selected taxpayers. Indirect methods use available statistics, and match information on income and assets reported to the tax authorities against information on consumption and savings from other sources.

These are some of the methods that can be used for estimating the tax gap (or part of it).

- **Indirect methods**

Disposable income method	For the household sector in the National Accounts consumption and savings are compared with income reported on tax returns.
GDP-method	GDP measured from an expenditure approach is compared to GDP measured from an income approach.
Unexplained difference in the Financial Accounts	Accumulated savings not covered by the reports from financial institutions (savings calculated from income and consumption are compared to reports from financial institutions). This can show assets hidden abroad.
VAT-discrepancy	Theoretically calculated VAT based on the National Account compared to VAT on tax returns.

Monetary methods	The development of cash transactions. A "surplus" of cash money is calculated that could not be explained by normal financial activities.

- **Direct methods**

Surveys	Surveys to taxpayer (postal and/or interviews).
Audits	Random audits designed to fit systematic analysis of result.

Several methods should be combined in order to achieve reliable result. These measurements can give the tax administration some idea about the size of the tax gap; it is not possible to measure the tax gap with any high level of precision. The measurement should therefore not be used for performance measurement in the short term. The measurement is useful for identifying long-term trends and for providing reference figures for risk assessment.

3.2.4. Linkage analysis

Italy

Linkage Analysis is an application that provides a graphic chart of the connections between persons and companies and that allows access to the Tax Register (*Anagrafe Tributaria*) in order to highlight any information useful for fiscal purposes relating to a single taxpayer. Linkages refer to:

- membership of groups;
- membership of companies;
- office held in a company;
- family relationships;
- consultants keeping the accounting records.

Therefore, the main task of the application is to show the most relevant and meaningful relationships and to highlight the situations "at risk", like:

- bankruptcy, liquidation, etc;
- non-compliance with fiscal law;
- closing down of the activity within twelve months from the start;
- non-payment of VAT;
- tax credit set-off.

3.2.5. M.E.R.C.E. (Foreign Trade Monitoring and Description)

<u>Italy</u>

M.E.R.C.E. is a data warehouse worked out and maintained by the Italian Customs Agency. It is also used by the Revenue Agency as a source of data on intra-community and extra-community transactions.

Throughout M.E.R.C.E., it is possible to analyse transactions of goods carried out by the Italian operators from and to members States of the European Union (*Analisi EU*) or extra-European Countries (*Analisi extra-EU*) and make up a list of the overall transactions relating to a specific operator (*Analisi intestatari*).

EU transaction data derive from Intrastat forms, while extra-EU information comes from the certifications held by the Italian Customs Agency.

M.E.R.C.E. allows to check whether such transactions took place or not and if they were carried out properly.

A multidimensional analysis can be processed by extracting data on the basis of different criteria, such as:

- Period of time;
- Regime applied;
- Place of origin/destination;
- Product cluster;
- Means of transport;
- Competent Customs Office;
- Etc.

Statistics, ratios and charts are finally displayed.

3.2.6. BEE (External bodies Data Base)

<u>Italy</u>

BEE is a Data Base used to detect non-compliant taxpayers on the basis of information on their taxable capacity. Groups of taxpayers having specific features are selected for tax controls. The goal is to detect tax evasion phenomena and analyse their trend.

Sourcing from BEE, information has to be considered just as an input because a further investigation is required in order to compare the liability of the taxpayers and their actual level of compliance. BEE is made up of the following databases:

- BEE – Aircraft: information on legal transactions (ownership, real rights, etc.) concerning aircraft.
- BEE – Insurance: information provided by companies, agencies etc, concerning insurance contracts.

- BEE – Chamber of Commerce: information provided by the Chambers of Commerce concerning firms.

- BEE – Supply of contracts: information on supply and transport contracts stipulated in private non-registered agreements for an amount exceeding a specific threshold.

- BEE – Capital flows: information provided by banks, stock brokerage companies, change offices etc, on capital flows by/to foreign Countries related to money, shares, securities and so on, for an amount above a specific threshold.

- BEE – Craft: information provided by shipping agencies and civil motorization (naval units) on transactions concerning ships, barges and pleasure craft.

- BEE – Rebuildings: information provided by banks and other financial institutions on bank transfers due to real estate rebuilding which allow to claim for tax deduction.

3.2.7. Early warnings

Italy

Early Warnings is an application, constantly updated, whose purpose is to start up early controls on suspicious behaviours, at the first hint of tax evasion.

Indeed, the program highlights discrepancies and irregularities relating to all holders of VAT identification numbers, by checking transactions carried out in the last 36 months and cross referring to some risk indicators which are directly or indirectly related with the taxpayer.

(1)   The main risk indicators directly related with the taxpayer are:

- VAT totally or partially unpaid

- Set-off of VAT credits-debts

- VAT assessments

- Previous winding-up or bankruptcy

- Customs operations

- Intra EU transactions

- Change of fiscal residence or legal place different from the place of the activity

- Claims for tax refund

- People more than 75 years old or less than 18, having a VAT identification number.

(2)   Other risk indicators processed by the application are indirectly related with the taxpayer because they concern other people linked to him by means of business relationships, for example, the same legal representative, partners, or managers.

The main indirect risk indicators are as follows:

- assessments of direct or indirect taxes

- issuing of false invoices

- bankruptcy or forced administrative liquidation

- total tax evader

- activity ceased within one year from the start.

Information is crossed referenced by the tax officers on the basis of methods set up by the Central Division of Analysis and Research so as to select taxpayers to be checked

3.2.8. Total evaders

<u>Italy</u>

ET – Total Evaders – is a data processing system that highlights suspicious behaviours of taxpayers on the basis of risk indicators. ET provides the opportunity to identify persons receiving income from independent services or business activity who completely evade taxes.

The risk indicators resulting from the data processing are economic activities carried on and expenses incurred by the taxpayer.

Data is derived from internal or external sources (i.e. Chamber of Commerce) as well as other indirect information (i.e. power consumption).

Tax officials may select from 1 to 16 pieces of information and cross match them. Consequently, further controls may be carried out as to whether one or more instances are related to the taxpayer.

Some evidences of economic activity that can be processed by ET and that represent risk indicators are as follows:

- State property grants for a certain purpose (i.e.: land for buildings, immovable property used as office, car parks, industrial plants, sport plants, mines, museums etc.)

- Some registered deeds subject to VAT (i.e.: allocations to the taxpayer when the incorporation of a company takes place, ownership or usufruct of commercial buildings, mines, industrial machinery or plants, money gifts)

- Other registered deeds as hire of: industrial plants, patents, machineries, mines.

- Contributions to social security funds

- Registration at the Chamber of Commerce

- Registration at professional associations

- Authorisation to carry on activity

- VAT identification numbers active at a certain point in time

- Special risks insurance policies (transport, credit, guarantees, etc.)

- Ownership of special vehicles (buses, school buses, trucks, etc.)

- Power consumption by business premises.

Some expenses incurred by the person representing evidences of economic activity include the following:

- Purchase of bonds or shares abroad

- Social security contributions paid for employees, for domestic services etc.

- Compulsory contributions unpaid

- Transfer of capital abroad

- Interests paid on a loan

- Ownership of car, motorcycle, truck, bus etc.

- Payments of insurance premiums

- Transactions subject to registration (allowances or gifts).

3.2.9. *Risk analysis on new Vat identification numbers*

<u>Italy</u>

"Risk analysis on new VAT identification numbers" is an application processed by the Analysis and Research Division of the Italian Revenue Agency in order to improve the preventive fight against VAT frauds.

The software contains and automatically processes personal data, income and property information on taxpayers who, on their own or as legal representatives of a company, obtain a new VAT identification number.

The result of the processing is a "risk profile".

All VAT numbers are analysed and not only those ones which refer to a risky activity sector.

To each information a risk score is assigned, on the basis of the previous experience and of information provided by the local Offices tackling VAT frauds. Some factors refer to new VAT identification numbers (i.e. identity between business place and owner's/representative's residence, more then 2 changes of residence in the last 3 years, etc.), some others refer to VAT numbers previously obtained, if any (i.e. VAT set-offs, VAT refunds, no VAT payments in the last 5 years, etc.). Each factor further includes inner specifications.

The final risk score, estimated by the sum of 16 risk factors, is assigned to a taxpayer and represents an important risk indicator.

At the end of the process, the application provides a list of all new VAT numbers by decreasing risk score.

Selections of VAT numbers are possible by using the following variables:

- Territory (country, region, local Office of the Revenue Agency)
- Activity (a specific activity, the whole sector, etc.)
- Period of time (a year, half-year, a quarter, a month)

Software is useful in order to detect suspicious cases that the local Office has to further analyse before carrying on any control on the spot.

The application is an Analysis and Research tool for the local Offices of the Revenue Agency.

The regional offices are charged with the control, coordination and the evaluation of the results of the analysis.

3.2.10. Pre- registration controls

<u>Greece</u>

Local tax offices which are operating a computerised system are competent to allocate a Tax Identification Number (TIN) to a new taxpayer who wants to register with the view to commencing a business activity.

Certain forms must be completed and, along with the relevant documentation brought by the taxpayer, filed with the registration department of the local tax office, which in most cases is the tax office of the domicile of the taxpayer.

Each TIN possessed by a taxable person or legal entity in Greece is unique and must be used for all business transactions and relevant tax obligations (VAT, income tax, etc). The tax authorities must then apply certain procedures so that the necessary information is collected and taxpayers aiming to tax evade are deterred.

Firstly, the documentation is scrutinised by the registration department (desk validation) and then an on line cross-check takes place with the central data-base of the Ministry of Finance and Economics to avoid the allocation of a TIN to taxpayers already registered.

Before the registration has been completed, in the majority of new taxpayers and within 3 days period following the abovementioned filing of forms and documents, a tax auditor visits the premises declared as the place of business activity and carries out a pre-registration inspection so as to verify whether:

– the premises really exist and meet the purposes of the declared business activity,

– transactions have already taken place, or assets have been purchased by the taxpayer before the commencement of activity.

A short report is consequently produced by the auditor and filed with the registration department of the local tax office, and is taken into account before final approval for business activity is granted by the local office director.

3.3. Examples for chapter 2.6 - Risk analysis

3.3.1. External sources, Internet (Web robot)

The Netherlands

Since 2004 the Dutch Tax Administration has used XENON, an Internet (web) robot, which not only detects unknown taxpayers, but also other probable non-compliant events such as the unauthorised use of brand names or illegal diversion of trade.

XENON has been developed by the Dutch Tax Administration and exists of three main parts:

(1)   Basic Fiscal Search tool (Trainer). With this tool one or more profiles can be set up.

(2)   Web robot (Crawler). The web robot searches the Internet for sites which meet the profile. Parameters can be set to determine how deeply links have to be followed and how many sites have to be found as a maximum and how long XENON has to search the Internet.

(3)   Web Identification Tool (WebID). WebID supports the identification of the websites owner.

The results are correlated with the databases of the Tax Administration.

XENON operates as follows:

– with some examples an expert shows the XENON-'trainer' what to look for;

– based of these examples the XENON creates a profile, which can be refined if necessary;

– after the final profile is created, the Crawler enters the Internet to search for a determined time or a determined number of sites which meet the profile;

– the results are filed and can be analysed;

– with WebID a 'probable site owner' is identified.

3.3.2. Qualified new registrations by using checklists

Germany

Since 2005, <u>every</u> taxpayer seeking to get a VAT registration for the first time is examined based on nationwide uniform checklists in order to recognise risky cases as soon as possible. The checklists include a catalogue of features, which are tuned to the respective legal form. The selected features are based on the knowledge of national anti-fraud experts.

Joint stock companies for example are judged on;

• whether the persons involved in the new company have acted deceitfully in the past

- whether the legal representative is already registered for taxation

- the kind of trading sector

- whether there is something noticeable about the bank account

- if shareholders are compliant in their tax affairs.

Primarily, the check is based upon the information from a questionnaire for tax registration. This multi-page questionnaire is sent by the tax authorities to the newly set-up taxpayer to get detailed information of its business.

There are some different internal information systems at the tax office's disposal. These databases contribute to a higher quality check; for example:

- national name information system of all registered taxpayers (name, address, date of birth, VAT-identification Number, bank account and some general tax features)

- national database of VAT-fraud cases

- local databases which show office-service-addresses or cases with tax liabilities

To get a maximum benefit, every information system available is used. As soon as one of 27 criteria is fulfilled, the case will not be registered for VAT and the tax offices are instructed to carry out further checks.

In principal this is in the guise of an unannounced limited audit to get a real picture of the enterprise. If there is already a justified suspicion of tax evasion, the tax investigation office has to be contacted immediately.

3.4. Examples for chapter 2.8 – Risk Reduction

3.4.1. Limiting opportunities and reducing unintentional errors

The Netherlands

Advisory body

In 2005, the Dutch tax administration started an advisory body to advise on the reduction of administrative burdens for private individuals.

Almost 600 people reacted to an announcement made in national and some regional newspapers to join the advisory body. They all were invited to a special 'Day of Ideas' and among other things asked to bring in their suggestions, proposals and ideas. The fact that the tax administration took pains to listen to the people was highly appreciated. Seventeen of the candidates (individual tax payers) were selected to be part of the advisory body.

The advisory body is chaired by the Director General and meets twice a year. It not only advises on ideas from the tax administration but also its own ideas can be put forward.

3.4.2. *Consultation in Agricultural Sector*

The Netherlands

In the Netherlands for more than ten years a structured consultation exists between the Dutch tax administration and the agricultural business. Specialist tax consultants advise the majority of farmers. These consultants are united at a national level and representatives are the persons the tax administration speaks with.

The result of this consultation is the yearly agreement of standards for the most usual farming costs and for particular means of business and stock. These agreements are laid down in an official resolution of the Finance Secretary. Afterwards the standards are recorded in a brochure, which is sent free of charge to every fiscal consultant in the country. The content is also available on the tax administration's internet site.

The standards are found on many external and free information sources. These sources are also mentioned in the brochure. On the basis of the previous year's standards, actual developments and the study of the sources mentioned above, the new standards are settled in a first draft. The draft proposal is discussed with representatives of the consultants' organisation. This consultation results in jointly accepted standards for a one-year period. These standards concern the whole tax administration *and* all farmers. Deviation is possible only in exceptional cases, but then a clear explanation is needed. Some standards do not have the weight of a norm but are a guideline, for example the private part of the costs of energy and telephone. Deviation from the guidelines is possible if the taxpayer can provide an acceptable argument, usually supported by evidence. Of course, if agreement cannot be reached then the usual appeals process can be followed.

Standards are agreed on the following aspects:
– private use of agricultural goods;
– private element of costs
– assessment of value of cattle,
– assessment of value of corn and grass;
– depreciation standards in horticulture;
– assessment of value of growth on the field;
– assessment of value of bulbs;
– assessment of value of trees;
– depreciation standards of farming machines;
– depreciation standards of production rights.

With this procedure, a situation is reached in which there is no longer a need for discussions at taxpayer level about the level of costs and values. This contributes to a higher level of compliance in tax returns and tax payment.

3.4.3. Example of increasing perceived probability of detection

<u>The Netherlands</u>

A study of the effects of publicity has been carried out in the Netherlands. The study was part of a project in which the Dutch Tax and Customs Administration was able to obtain information on money held by Dutch residents in foreign bank accounts.

Taxpayers were given the chance to make a voluntary disclosure to the tax authorities that they held a foreign bank account that had not previously declared on their tax returns. In exchange for disclosure they were guaranteed exemption from penalties - although they were still required to pay the tax due, with interest, going back up to twelve years. The scheme was publicised by means of press releases. The study showed six aspects to be crucial in influencing compliance.

- Targeted coverage: This principle dictates that the more personally relevant the media coverage is to the target reader, viewer or listener, the greater its impact.

- Arguments for and against: The arguments advanced by the reporter, the journalist, for 'falling into line' (or not) are an important factor. This is firstly because those arguments could be either in favour of or against 'falling into line'. Secondly, the strength of their arguments may vary. Where strong arguments are put forward in favour, or weak arguments against, this will tend to increase the number of taxpayers falling into line (albeit reluctantly).

- Risk of detection: People can be influenced to opt for compliant behaviour if we ensure that the chance of detection (or at least, the taxpayer's perception of it) is high and that the consequences for anyone found failing to comply will be serious (or at least if we give the impression that this is so).

- Standards of behaviour: Standards of behaviour can have a significant effect on compliance. Two different types can be distinguished: prescribed standards, what other people expect from the tax administration (both the implicit and the explicit rules) and observed standards, what the people in society do. The influence of standards is particularly great when people's attention is specifically drawn to them.

- Legitimacy: Taxpayers are more likely to behave in a compliant way the more they are convinced that the Tax Administration operates in a fair and just way - the most important aspects of which are the justness of procedures, the way in which taxes are levied and the way the tax administration performs its enforcement duties.

- Consequences: Research shows that 'Knowing what the possibilities are' is an important part of influencing people's behaviour. That was why it was essential in this project to tell taxpayers that 'falling into line' was a possibility.

Based on the above, a model was developed for effective press releases. This is described below.

Large numbers of taxpayers disclose secret foreign savings to tax authorities

Over the past few months interest in the Dutch Tax and Customs Administration's scheme which allows taxpayers to declare previously undeclared foreign bank balances (3) has been enormous (2). The Administration's web site (3) (www.belastingdienst.nl) where the 'Declaration of foreign bank account' form can be downloaded has had over 50,000 visitors (2). People who make a voluntary disclosure to the tax authorities can avoid the penalty normally chargeable on back tax (6).

In early 2001 the tax authorities secured from various banks in various countries information on Dutch residents who held funds there (5). The information was obtained partly under the provisions of international treaties on the basis of which the Tax and Customs Administration can issue assessments on the account holders (4). Other information came from tip-offs (5).

Failure to declare savings held outside the Netherlands to the tax authorities is an offence and costs the Netherlands several billion euros every year (1). Almost a thousand Dutch residents have completed the Internet form so far (2). Others have made their disclosure direct to the tax authorities or through a lawyer (3a).

(1) Prescribed standard
(2) Observed standard
(3) Possibility
(3a) Possibility for people who do not have Internet access
(4) Legitimacy
(5) Broadening of the target group
(6) Consequences

3.4.4. Creating a third party interest; horizontal supervision

<u>The Netherlands</u>

The relationship between government and citizen in general and between a tax administration and a specific taxpayer develops from a superior-subordinate to a more equal one. Horizontal supervision fits within this development in which citizens also feel responsibility for law enforcement. On the other hand law enforcement in a complex and rapidly changing society cannot function without the knowledge present in society. Horizontal supervision, supervision by non-governmental organisations, is additional to supervision by the government. In the Netherlands, the developments in horizontal supervision are different for specifically targeted groups.

Large Companies

The small number of companies belonging to this group makes individual agreements possible. In such an agreement mutual obligations for the future are recorded, those to complete the past and the agreements made to inform each other in case of unforeseen acts or activities with fiscal consequences. Companies are invited to participate on a voluntary base.

Small and Medium Sized Companies

The number of companies doesn't allow individual agreements. The approach points to cooperation with representative associations within sectors. Often there is common interest between the administration and the organisation on subjects such as moonlighting[2], information exchange and a joint determination of norms and ratios. Another approach is the stimulation of self-certifying sectors. But 'it takes two to tango' and because trust and willingness to cooperate is needed, tempo and degree of cooperation will vary per sector.

Private Individuals

The main interest for this target group lies in making things easier. Profit is foreseen in a pre-filled in tax return. The Tax Administration fills in the known data and the taxpayer signs for agreement or makes changes if appropriate. Another example is the development of a Personal Domain for every taxpayer on the internet. In this domain personal data (status information) is recorded and transactions can be done, for example a fiscal relevant change in the personal situation.

Intermediaries

Intermediary parties such as administrative, financial and tax advisors, and software houses play an important role in the fiscal area. Cooperation with them leads to fiscally acceptable products and therefore indirectly to more compliance.

3.4.5. Sector Studies (Studi di Settore)

Italy

Sector Studies have been introduced by Law no. 427 of 1993 to allow the Italian Tax Administration to check taxpayers using compliance.

From a technical point of view, Sector Studies are a process of analysis and economic evaluation of SMEs with respect to the specific territorial features of each enterprise and how the business is operated. Thanks to a comparative analysis, these Studies were worked out considering the existing relation between accounting and structural variables of each economic branch with respect to the belonging sector, to the production process, to the corporate structure, to the product of the activity, to the location, to the market and to other significant elements referred to each specific business. Variables come from information contained in questionnaires filled in by taxpayers. In this way an accounting and structural database is created.

As to each economic sector, such an analysis provides for:

- The identification of structural elements which are characteristic of the business activity in a sector (i.e. products, reference markets, production process and procedures, selling channels and procedures…);

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[2] 'informal economy or black market activity'

- Identification of the business organizational model of a sector through the Cluster Analysis;

- Taxpayers selection under normal economic conditions using significant economic indicators with respect to the sector activity (i.e. trade: mark-up, inventory turnover, employee productivity);

- When applying Sector Studies, taxpayers are assigned a cluster singled out with respect to the business organizational model of the sector;

- The definition of the revenue functions and territorial analysis: the statistical analysis through Multiple Regression allows the tax administration to detect the relation existing between revenues and accounting and structural data derived from questionnaires; as a consequence, each organisational model referred to a sector is assigned its own revenue function. Revenue functions determine a range, between a minimum and a maximum, where to locate subjects operating under similar conditions but also determine a "reference revenue" that the taxpayer may report to avoid tax assessments.

Sector Studies are based on a principle already applying to the tax system, i.e. assessments may be based on an indirect audit when there exist "deep discrepancies between data declared and data derived from characteristics and conditions of the activity carried on".

Considering that Studies are useful to make an estimate of turnover but not the definitive income, amounts derived from the application of the same studies are valid only as an indicator. The application of the study will be enough to shift the burden of proof in favour of the administration unless the taxpayer can prove to the contrary.

Sector Studies are a tool to improve compliance for various reasons:

- taxpayers, through trade associations, may submit their observations and may participate in the Commission of Experts (which approves the Studies) along with Tax Administration's representatives;

- taxpayers with a revenue lower then the threshold established by the "Revenue Function" may avoid a tax assessment by "adjusting" the revenue declared;

- they allow a study into the evolution of the economic and business context.

3.4.6. Example of a sector study: Retail trade of newspapers and magazines

<u>Italy</u>

Retail trade of newspapers and magazines is just one of the large number of sector studies applied by the Italian Tax Administration. In order to gather information on this sector, the Revenue Agency sent a large number of questionnaires to taxpayers asking various accounting and structural data. Taxpayers sent the questionnaires back. Some of these could not be analysed

because of mistakes and incompleteness. Using this information, a "clustering analysis" was worked out, obtaining the following eight clusters:

- Sales points in commercial centres or markets: medium-large sized; publishing mostly.

- Newsstands: located in heavy traffic zones (like bus stops, public offices, schools, …); small sized; publishing mostly.

- Newspaper kiosks selling tourist products: medium-large size; publishing, tourist and amusing goods (maps, postcards, CD, souvenirs, …).

- Newspaper kiosks / Stationery's shops: large sized stationery. Vast range of articles (publishing, gifts, …).

- Sales points in busy places (railway stations, service areas, universities, hospitals, …): medium sized newspapers kiosks or stationeries; publishing mainly.

- Seasonal newspaper kiosks: medium sized new-stands; publishing mostly.

- Comics' sales points: medium-large sized stationeries; new and second-hand comics.

- Traditional newspaper kiosks: medium-large sized stationeries, located near bus stops, churches or schools; publishing mostly.

In the next step, the economic indicator "added value per employee" was chosen and divided into intervals. Taxpayers, whose indicators are outside of intervals are not analysed. Then, with reference to each cluster, a "Revenue Function" is processed using statistics. This function is obtained connecting the revenue (dependent variable) with some accounting and structural data (independent variables).

A taxpayer may belong to one or more homogeneous groups. In this way "indirect revenue" is estimated.

3.4.7. Information and assistance

Italy

The Italian Revenue Agency promotes a high level of fulfilling tax obligations for taxpayers, not only simplifying its relationship with them but also improving and increasing the quality of the services.

For example, when taxpayers have to file tax returns, tax offices guarantee a complete assistance for the correct compilation of tax return forms, their transmission on-line and the application of tax legislation. Taxpayers may also use the web site and the Call Centre of the Revenue Agency providing assistance for any problems.

Moreover, the majority of tax offices performed an organisational plan for home fiscal assistance towards people who are not able to go to the Office (old people, handicapped people, …). About this matter, an interesting event the Revenue Agency promotes is the so-called "Tax Administration among people", that is an itinerant manifestation organised along with

several municipalities. This occasion allows taxpayers to receive directly from tax officials, explanations about the fiscal laws. Taxpayers have also the chance to send their tax return on-line or to ask for fiscal code duplicate and so on. Municipality's officers will also take part in this manifestation explaining the local taxes in order to provide a complete service.

Tax-return forms and Revenue Agency's publications (fiscal guides for building restoration and IT services, fiscal terms dictionary, "service chart") are available at the Revenue Agency stand.

The objectives of this manifestation are:

- To increase the knowledge of the functions and activities of the Revenue Agency;

- To promote the initiatives and services of the Agency;

- To spread the knowledge of the tax system underlining the easy way for taxpayers to use and take advantage from the services supplied, especially on-line services;

- To improve the good relationship between the Tax Administration and taxpayers in order to increase the level of voluntary compliance.

3.4.8. Income Measurement Tools – Case Study: Bank cards linked to tax havens

Sweden

This case study explains a new approach to obtain information on assets in tax havens via domestic bankcard transactions.

Background

The Swedish tax administration has estimated that € 200 – 500 million in Swedish tax is evaded due to transactions linked to tax havens. Substantial assets are placed in tax haven banks. Investigations show that very often these assets are not declared for tax purposes and that they often originate from undeclared income. Due to the fact that virtually no information can be obtained from the tax havens themselves, alternative methods for finding such information need to be found.

One approach is to trace transactions via the use of bankcards. To have tax haven assets at one's disposal in their country of residence (i.e. Sweden), these tax evaders can use international bankcards linked to these accounts. The assets can then be used for purchases, restaurant visits etc as well as cash dispenser withdrawals in Sweden and abroad. The use of bankcards has been promoted by tax consultants in different tax evasion schemes.

By identifying the individuals using such cards, the tax administration will be able to find:

- Unreported income from work and from business activities;

- Unreported savings (interest, dividends, capital gains etc);

- Individuals that should be regarded as resident for tax purposes.

Approach and working methods

In Sweden, some companies act as intermediaries for running technical systems for the distribution of card transactions. All transactions made in Sweden, regarding both domestic and foreign cards, pass through these intermediaries.

By using third party audits, the Swedish tax administration has obtained information on all card transactions made between 2001 and 2003 from these intermediaries. Most of these transactions concern domestic cards but about 3 % of the total number of transactions originates from foreign bankcards, some of them from tax havens. The information regarding foreign cards consists of approximately:

- 48 million transactions

- 7 million bank cards

- A total amount of €4 billion

- Cards issued in 123 different countries

A selection has to be made in order to target persons who are suspected of evading tax via tax havens.

The first step is to identify all cards which are linked to tax haven banks. This can be done via each card number which indicates the issuing bank. All transactions linked to that card are then combined and the cards containing the highest amounts and/or most frequent use are selected for further investigation.

Furthermore, the trade pattern connected to each card needs to be assessed. A lot of purchases made via foreign cards are of course made by persons who are not residents in Sweden but tourists on business trips, etc. A trade pattern indicating that the person is a Swedish residential could be that transactions are made for food, home electronics, furniture and gasoline. A pattern showing transaction in several different locations, hotels, rental cars etc may indicate that the person is a non-resident.

The next step is to identify the cardholder. The information for each transaction shows the place of purchase but not the identity of the person performing it. The identification of cardholders is possible by doing third party audits. The use of a personal identity number[3] facilitates the identification. This could be a quite burdensome process. The third party audits have therefore been limited to places where large and frequent transactions are made.

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[3] According to Swedish law, each Swedish citizen receives a personal identity number at birth which is being used for several purposes in society (taxes, population registration, insurances, driver's license etc).

Finally, when the person is identified, an investigation has to be started in order to establish if the assets originates from tax evasion. Could the assets be linked to transfer of business profits to tax havens? Is the person not registered as a resident in Sweden but is in fact residing here (and consequently taxable)?

Media usage

A part of the Swedish strategy to improve tax compliance is to use the media to inform the public about activities carried out by the tax administration. The primary objective is to make honest taxpayers aware that tax evaders are investigated. In the case of bankcards, the tax administration, has via daily newspapers and TV news, informed the public about the possibility of retrieving such information and the ongoing control activities.

Results

The work with bankcards in tax havens is an ongoing project. So far, approximately 2000 card holders have been identified and about half of these have been examined more closely leading to about 500 (mostly ongoing) investigations.

3.4.9. Letter Treatment

Sweden

Sending letters to taxpayers can be an effective treatment. Letters can inform about tax policy and about past and future audit activities. Letters can also be used as a tool for influencing attitudes of the taxpayer. This can be done by informing taxpayers about other taxpayer's opinions and behaviour regarding tax matters (based on surveys).

The Swedish Tax Agency has carried out the following test of a letter treatment.

Letters were sent to two similar groups of businesses, the self-employed in the construction sector. The letters were sent during the year of income, long before the tax return should be filed. One group received a letter that said that some (of those that received the letter) would be audited the following year. The selection method was also described. Those with the lowest net cash would be audited (net cash shows available means for covering living expenses and consists of total income, total expenses and net capital change). This was the treatment group and it was called the *test-group*. The other group received a letter explaining that some would be chosen for audit by random (the *random-group*, used only for measuring purpose).

A third group was also used for measuring purpose. This group, the *control-group*, did not receive any letter at all (but was otherwise similar to the two letter-groups).

The purpose of the letters was to influence the behaviour of the taxpayers so they would declare a higher (more correct) income. The number of audits

carried out was not higher for the letter-groups than for other self-employed businesses, the letters should work as leverage.

The results of the letters were measured when the tax returns were filed (and before any audits were carried out).

The letters were sent to small groups because it was only a test. The result showed that the test-group (subject for the chosen treatment) increased their income the most. The random group also showed an increase in average income though slightly lower than the test group. The following diagram shows the average increase in income.

Increase of average income between year 2003 and 2004

Group	Increase
Test	~7,8%
Random	~6,1%
Control	~3,3%
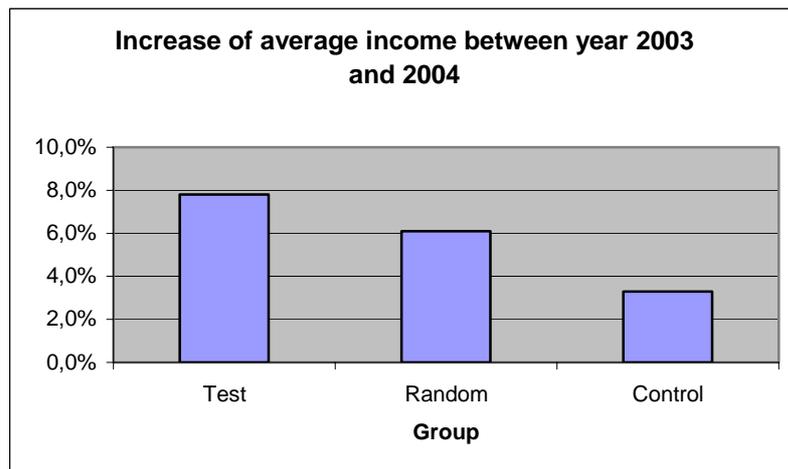
3.4.10. "Take the bill"

Poland

Every person who is buying goods or services should receive a document as a confirmation of closing a deal. If the salesman owns a cash register it would be a bill. Such a bill includes information concerning at least price, due tax and salesman's data. Generally, the bill should be given to the buyer without specifically requesting it. Unfortunately, it is not so obvious for all the salespersons.

The clients buying goods or services should ask for a bill because it is important for many reasons:

- it makes easier to claim buyer's rights in case the quality of goods or services is not satisfactory.

- it is conducive to honest competition, because the salesman, printing the bill, registers the transaction as part of the turnover, decreasing the "shadow economy".

- indirectly it is favourable to everyone because the tax paid comes in to the national budget so it makes possible for the state/government to provide all taxpayers with proper health care, education, protection etc.

Taking into consideration all three factors mentioned earlier and the fact that not every salesperson gives the bills, some precautions were taken. One was to educate taxpayers on their rights, obligations and benefits. The Ministry

of Finance of Poland started a project called "Take the bill". It was directed at:

- consumers (also children and teenagers)
- entrepreneurs who were obliged to register their turnover by means of cash registers,
- consumer organisations
- business representative organisations
- the media.

Before stating the educational programme, an opinion poll was conducted and taxpayers were asked to answer 3 basic questions:

- Do you receive a bill every time you buy goods or services?
- Do you ask for a bill every time?
- Did it ever occur that the salesman who used the cash register refused to print a bill?

After compiling the outcomes of opinion poll the Ministry of Finance organised a press conference to announce the beginning of the "Take the bill" action. Also, information leaflets and posters were prepared and distributed as well as actions taken to educate children and teenagers.

3.5. Example for chapter 2.9

3.5.1. Tax payer surveys

Sweden

Taxpayer surveys are regularly used in Sweden to assess the attitudes of people in the community towards tax issues. The survey in 2001 revealed that young people had a more positive attitude towards tax evasion than the total population. One item in the survey was: '*I think it is okay to evade tax if I have the opportunity*'. 12 % of the age group 18-24 agreed compared to 7 % of the total population.

This was considered a risk (especially for the tax revenue in the future). It was therefore decided to run a campaign with the objective of influencing attitudes of young people towards less acceptance of tax evasion. The campaign was designed to run for three years. It started in 2002 with TV-advertising (a short film about how the society would look like if we didn't pay tax), distributed information in schools about how the taxes are spent, and the Director General sent a letter to the target group with some information about taxes. A web site was developed with general tax information. During the second year the campaign continued with additional TV-advertising showing the connection between taxes and benefits like healthcare, libraries, infrastructure, etc. The municipalities also put up small posters (stickers) with the message "Paid for by you" on park benches, waste bins, schools and similar objects.

The results show that the campaign has been working. The survey in 2004 showed that the attitudes of young people have changed. Attitudes are now comparable to those of the total population with only 7 % in the age group 18-24 now agreeing with the item mentioned above.

3.6. Examples for chapter 2.12: Corporate Governance

3.6.1. Management Assurance

United Kingdom

Risk management is central to strategic management. It covers a series of well-defined steps which, when taken in sequence, identify risks and provide insight into options for controlling potential opportunities and threats to delivery of objectives. Effective risk management takes account of probability and/or impact factors, limits exposure to risk, and helps manage, rather than eliminate, the risk of failure in achieving the objectives.

At a strategic level, risk management is used to protect the tax administration's reputation, and safeguard accounting for public funds. At an operational level, effective risk management ensures delivery of major projects and programmes provides early warning of potential problems and/or identifies potential opportunities.

All staff and particularly managers, should identify, understand and manage risks, and develop an appreciation of which risks can be tolerated and which risks cannot.

The following describes potential internal risks and suggested options to test and reduce the risk.

Threat	Countermeasure	Activity
The Central Risk Analysis may not produce the correct risk ranking of taxpayers	Random selection of taxpayers from each segmentation for audit or other intervention.	Audits should preferably be undertaken by experienced staff to fully test the ranking process
Inappropriate tax refunds authorised. a) fraudulent claims by staff b)Inappropriate release of funds	a) Random selection parameters necessitating full audit b) Complete listing of all approvals for management consideration	a) Audits should be undertaken by staff not connected with the risk process b) Contacts to be made by managers not connected with the risk process
Custom & practice may not be following central policy	A programme of system reviews planned over a given cycle	A team of "experts" to undertake local and central system reviews
High risk taxpayers not identified as such	Local management to review decisions based upon local risk	Observations should be fed back to individuals

	assessment of their staff	
Taxpayers selected for the wrong intervention	Local management to review decisions based upon local risk assessment of their staff	Feedback from intervention staff encouraged
Poor quality interventions	Local managers to review time allocated	Managers to accompany staff on audits to judge performance
Collusion by staff with taxpayers	Managers to make follow up approaches to taxpayers based upon a risk assessment of their staff	A programme of "overtaking" and "return" visits or contacts required

Managers are expected to:

- understand the risks they face, their causes, probability and impact;

- prioritise the management of risks - ensuring that risks of highest concern are addressed before effort is directed towards lower-level risks; and

- manage risks in their areas to ensure the tax administration's exposure to risk is aligned with risk appetite/tolerance, and that controls put in place are proportionate to the risk .

All of this is brought together through Management Assurance Plans.

3.6.2. *Quality certification*

Italy

A Quality Certification of the local offices of the Italian Revenue Agency is presently being carried on in order to:

– ensure and develop fiscal assistance to taxpayers and simplify audit procedures by speeding them up, increasing the fiscal yield and reducing the legal cases;

– ensure that the organization is based on process integration and on multi-purpose teams.

The process of Quality Certification consists of several stages:

– Presentation of the project: The regional responsible explains the project to the responsible of the teams;

– Analysis of the management and operational processes: Evaluation of the existence of the conditions to qualify for Quality Certification. Confirmation that critical factors were tackled and proper initiatives were set up in order to solve them;

– Implementation of the Quality Management System: Controls of the internal procedures in order to check if the process is effective;

– Analysis of the results: The results of the Quality System implementation, the objectives for the immediate future and the suggestions to improve the system are reported;

– Identification of Offices to be checked: The Central Personnel Directorate is made aware of the Offices that will be controlled by the external body charged of the check;

– Certification: The external body, after having checked the organisation is in conformity with the standard, certifies the Office. The Quality Certificate is valid for a three-year period and subsequently a new one will be issued if this is the case.

PART 4 – Technical details (Statistics, variables, mathematics, I.T)

4. INTRODUCTION

Risk identification and risk analysis often depends on the processing of vast number of data which is available within the tax administrations. Only advanced use and knowledge of information management systems allows that meaningful information to be derived from this data and decisions made faster (real-time), more consistent and more reliable.

The most commonly used methodologies are described below. This Guide only provides a short description of their main features with a view to introducing those tools and to broaden the knowledge about data processing techniques. As such it offers a minimum basis for any official dealing with Risk Management.

4.1. Relational databases

Relational databases use a set of tables which are linked together and made up of columns (fields) and rows, in which the information is stored. The correlation is achieved by using unique values (primary and secondary keys) stored in appropriate columns, which allows the information in one table to be connected with that in the other tables. Using a well-designed relational database can greatly reduce the amount of data that must be entered each time a record is added.

An advantage of using a relational database is that it searches through large numbers of records relatively fast, making it particularly useful for tax administrations.

4.2. The use of data processing techniques for Intelligence Purposes

Intelligence is the process through which data are made available, furnishing reports and assembled information to decision-makers for analysis of the activities.

This process is generally made up of four phases:

1. The extraction of the data from the original sources and its entry into a temporary management area;

2. The transformation of the data into a usable form: The data, drawn from the abovementioned sources, is entered into a temporary area, where it is filtered and cleaned. In particular, the filtering operations consist in the elimination of data that is not coherent in accordance with predefined rules (for example, the coherency between taxpayer's code and personal data for natural persons) or the elimination of data that lacks the fundamental information (for example, it lacks the taxpayer's code).

3. The loading of the data into a dedicated database (*data warehouse* and *data marts*);

4. The data analysis and *data mining* procedures necessary to perform the queries on the *data warehouse*. One of the most popular data mining exploration

techniques for risk identification is a technique known as *'neural network'*. This is particularly suitable for so called 'predictive determination' which allows a quick identification of risk related activities.

The main terms used for these processes are explained below.

- **Data warehouse**

A data warehouse is a special database containing historicised data. This data is used for analysis at all levels: from strategic planning to decisions on particular information.

The quality of the data is an essential factor for the functionality of a data warehouse. In fact if the data memorised is inaccurate or contains errors, the resultant analysis can be incorrect or even counterproductive. To achieve high levels of data quality it is necessary to use filters that use many data integrity rules and thereafter to carry out checks relating to quality of the data.

When designing the data warehouse it is necessary to create tables relating to facts and dimensions and to set indexes with key fields in all the tables.

The *fact tables* collect the numerical data of the analysis (number of subjects, amounts, etc.) which result from the selection made on the basis of the dimension tables. Often the *dimension tables* are organised hierarchically (for example, the territorial table: national – regional – provincial – municipal).

The most common structure is comprised of one fact table and more than one dimension table (the star structure).

- **Data mart**

It is difficult to construct a data warehouse containing all the data found within a tax administration. Given the volume of data it would be problematic to carry out effective and accurate analyses. For this reason an easier approach is often used, based on the subdivision of all the information into simpler subsets in which the object of the analysis is clearly identified. A data mart is the representation of the data organised in this manner and accordingly it represents a part of the information.

The emphasis of a data mart is on meeting the specific demands of a particular group of users in terms of analysis, content, presentation, and ease-of-use.

In practice, the terms *data mart* and *data warehouse* each tend to imply the presence of the other in some form. The design of a data mart, however, tends to start from an analysis of user needs where a data warehouse tends to start from an analysis of what data already exists and how it can be collected in such a way that the data can later be used. In general, a data warehouse tends to be a strategic but somewhat unfinished concept; a data mart tends to be tactical and aimed at meeting an immediate need.

- **Data mining**

Data Mining is an analytic process designed to explore data in search of consistent patterns and/or systematic relationships between variables, and then to validate the findings by applying the detected patterns to new subsets of data.

The ultimate goal of data mining is to extract useful information from a large volume of information to predict trends and patterns.

- **Neural Networks**

Neural networks is a Data Mining technique and can be defined as an analytical technique modelled after the processes of learning cognitive systems and the neurological functions of the brain and capable of predicting new observations (on specific variables) from other observations (on the same or other variables) after executing a process of so-called *learning* from existing data. They can be used for any task which requires relations between "fuzzy" patterns to be recognised.

The artificial intelligence thus created makes it possible to identify from a whole series of cases those in which the relevant risks are inherent. Artificial neural networks mimic the capacity of the brain to organise itself through learning processes.

Neural networks can be useful for the following reasons:

1. Pattern formation: patterns may be formed from frequent and infinitely complex combinations of indicators. Risk-inherent cases may be precisely recognised as a result of the patterns formed. Patterns relating to VAT could be:
   – Founders of fictitious companies
   – Missing traders
   – Buffers
   – Distributors
   – Zero-result cases
   – Harmless cases.

2. Forecasts: forecast can be used in the tax field for example in the pre-emptive prevention of VAT fraud.

Not all problems can be solved by the use of artificial neural networks alone. For example, it is not possible to provide the processing official with qualified information as to why the case was identified as being risk-relevant. As a result, neural networks are often used in conjunction with other technologies (e.g. fuzzy logic).

4.3. Rule based systems

It is possible to identify cases with potential tax risks using a rule based decision system.

A rules based system is an expert system based on knowledge from, tax experts obtained over a number of years. It consists of:

– Facts

– Defined rules

– A controlling system with a rule interpreter.

To be used in a computer system, all facts have to be stored in a uniform database and the evaluated risks have to be described in abstract mathematical rules as simple as possible. A rule consists of one or more facts (preconditions) connected with each other and actions. Rules in the form of IF ”x" THEN "y” are particularly suitable. These kinds of rules are the basis for the computer-assisted analysis of risk cases.

A rule interpreter checks all incoming VAT declarations. As a central component, it decides which conclusions from all facts have to be drawn together. All the rules are checked by the expert system, as far as the preconditions are met and these rules worked out.

As soon as one of the rules is triggered, the case is reported for a personal check.

Example:

   Rule 1:   If   *"Newly set up enterprise"*   and

                            "*immediate turnover- amounting to millions*"   and

                            "*low VAT due*"

              Then   "*Suspicion of participation in a VAT carousel fraud* "

   Rule 2:   If   *"Suspicion of participation in a VAT carousel fraud"*

              Then   "*sales tax audit*"

In rule 1 "Newly set up enterprise", "immediate turnover amounting to millions" and "low VAT due" are the connected facts and "Suspicion of participation in a VAT carousel fraud" is the action.

Finally an expert system should have the capability to explain to the user its conclusions as "eloquently as possible".

# PART 5 – Organisational aspects of Risk Management

5.   ORGANISATIONAL ASPECTS OF RISK MANAGEMENT

This part provides an overview of how the Risk Management has been integrated into the work of tax administrations[4].

5.1.   How risk management is operated (Sweden)

The risk management work is coordinated at a central level but all levels participate in the work and the ambition is to make the risk assessment and the prioritisation a holistic view for the whole country.

The picture below describes how the risk management work is operated.
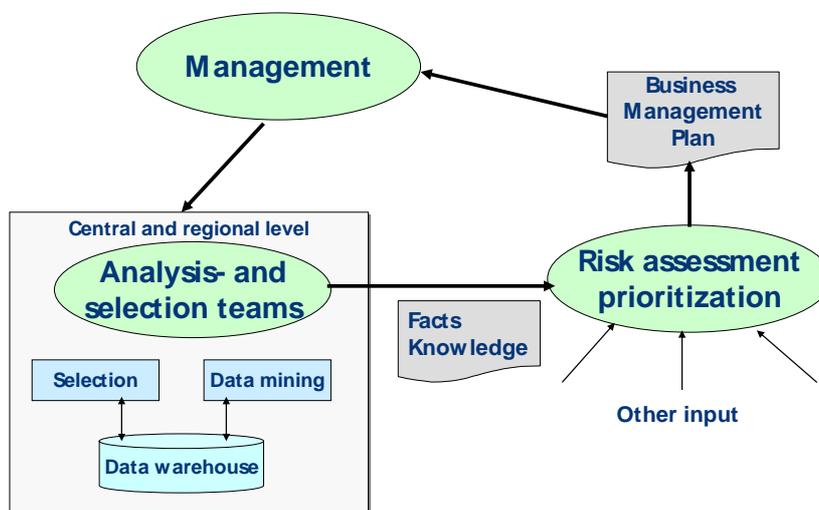
(1)   There are some analysis and selection teams working at both central and regional level. These teams are responsible for risk identification and risk analysis (providing knowledge). The teams consist of experts. They gather information and undertake analysis but they do not assess the risks or prioritise activities. Their job is to provide a foundation for decision-making.

(2)   There exists a permanent working group (risk management reference group) with delegates from all regions and from central level. This group does the risk assessment and makes suggestions about what to prioritise. Their work is based on the facts and knowledge provided by the analysis and selections teams together with other information (e g from environmental scanning). The suggestions are given to the management in the form of a preliminary business management plan.

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[4]   For the moment, only the Member States represented in the Fiscalis Risk Management Project Group are included in this overview.

(3)   The management receives the suggestions from the risk management reference group (together with other input that is joined in the business management plan). The management makes decisions based on this and a final business management plan is completed.

(4)   The analysis and selections team then participate in the execution of the plan. They are responsible for doing selection for audit and other purposes based on the priorities in the plan. The analysis and selection teams are also participating in the evaluation work together with the Evaluation Unit.

5.2.   Risk Management in the Netherlands

Risk Management is an integral part of the supervision and enforcement strategy of the Dutch Tax and Customs Administration (DTCA). The DTCA focuses merely on those taxpayers who don't comply with their fiscal obligations or don't pay their tax. Besides the fiscal risks both the financial importance and the impact on society play an important role.

The characteristics of the supervision and enforcement strategy are:

– A risk oriented and 'visible' approach of taxpayers with more material and physical examinations (often in close co-operation with other enforcement services);

– A sharp distinction between compliant and non-compliant taxpayers with a strong attention to those non-compliant taxpayers.

The Risk Management Organisation[5] is responsible for the risk management process within the DTCA together with the 13 regional tax offices. The risk management process encompasses risk identification, risk selection and risk development. High quality risks are being developed and become part of a nation wide, dynamic plan for supervision and enforcement. Coherence between all the components of the plan and close co-operation with the other parts of the DTCA that play a role in supervision and enforcement is an essential part of risk management. The Risk Management Organisation gathers and disseminates risk related knowledge and works in the 'here and now'.

A two-way approach: The DTCA has a two-way approach in risk management: top down for fiscal risks and bottom up for material risks.

A centrally steered and automated process selects electronic tax returns, based on selection rules and parameters for fiscal risks (income tax, corporate income tax, wage tax and VAT). Selection rules are based on available data and the correlation between them. Parameters are used to tune the workload to the available capacity on the regional tax offices.

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[5]   The Risk Management Organisation is product [risk] oriented and consists of four parts: (1) Income Tax and Corporate Income Tax, (2) VAT and Wage Tax, (3) Material risks and (4) Knowledge.

The material risks[6] are merely signalled in the regional tax offices. The basis of the material risks could be found in the correlation between available data of internal and external sources and professional judgement, creativity and intuition of the regional tax auditors. Material risks are handled on a project basis or as a theme (focus on more types of tax or economic sectors).

The philosophy behind risk management is important for the quality of the selection process as a whole. A prerequisite for a high quality selection system is a factual insight in the 'taxpayer population'. To achieve this, a random program (using sampling techniques) both for fiscal and material risks is being carried out. The results of the program will be analysed deep going and will be input for the selection system (learning circle).

Risk finding takes place in close co-operation with Research and Development. Trend analysis, research techniques like data mining and the results of the random sampling are used to find new risks and to improve selection rules. The Risk Management Organisation may support risks by means of risk related knowledge and / or risk treatment programs.

Culture and organisation

In the Risk Management Organisation it is important both 'what' has to be done and 'how' it is done. That is why a learning circle is incorporated in risk management. The learning circle is used to empower the staff of the Risk Management Organisation and the regional tax offices to make choices and take action based on observations, reflections, conceptualisation and experimentation.

Staff in regional tax offices and Risk Management Organisation use a Risk Database for recording and consulting on risks. The Risk Database is a computer application that records the whole 'lifecycle' of a risk.

It is important to be aware of and react to developments inside the DTCA and within society in the process of risk identification, selection and development. In that way risk management will be a dynamic and powerful instrument in supervision and enforcement for the DTCA.

5.3.   Central Risk Analysis in the UK

Since 1983, statisticians within Customs & Excise have produced an annual 'risk ranking' of VAT businesses for use by both policy and operational staff known as the 'VAT Central Risk Analysis' (CRA). The terms of reference for this detailed analysis were:

"to research factors that might lead to an improved allocation of resources, and to advise on their use in any central revision of risk."

For recently visited businesses, all risk-related variables were tested to find their significance when predicting the likelihood of finding money on a visit and the

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[6]   Material risks focus on the business activities instead of the bookkeeping. E.g.: Completeness of turnover.

amount of money to be found (Netal), if at all. The risk revision resulted in 25 risk bands for visited businesses (1 to 25), 10 for unvisited businesses (51 to 60).

The UK's methodology now used borrows heavily from credit scoring techniques, to improve the ranking and transparency to all. This method has provided a more accurate and discriminating estimate of hit rate than before.

The main advantages are:

- Relationships **between** variables are taken into account, whereas before this was not possible.

- The new method allows many more variables to be investigated quickly and visually. Many novel ideas and data sources can be quickly tested for their ability to assess risk. Examples of new variables include 'variability in returns' and 'number of times in debt'.

- The available Computer Server and the enhanced use of software gives more ability to bring data together quickly, enabling more time to be spent exploring how each variable is related to risk.

Experience in the UK shows that the credit scoring methodology is easier to understand and trust than the previous analyses.

Data used in UK Central Risk Analysis

This CRA used centrally held data on:

- Events over the last eighteen months;
- VAT returns over the last two years;
- Debt information over the last year;
- Business information from the mainframe;
- Previous events over the last three years; and
- International Trade risk information.

Creating 'Test and Train' datasets

The events included in the analyses are randomly split into 70% 'training' and 30% 'test' data. This means that 70% of the data is used to 'build', or 'train', the model while 30% is 'held back' to test the robustness. If all of the data were used to build the model it would be very predictive for *those* visits, but not *general* enough to be useful on new data, i.e. the model would be 'overfitted'.

Selecting variables

We select variables using a 'scorecard' in the Quadstone software. The scorecard uses a generalized form of multiple regression: basically modelling each variable against either hit rate or Netal and adjusting the 'weights' applied to that variable to take account of all other variables.

Selecting the most important variables in this way allows us to examine the individual and independent contribution of variables, having taken account of the influence of all others. Over 100 fields were examined, but this was narrowed down to some 85 variables to reflect current risk priorities and they were tested using the new methodology. These were further refined so that only the most effective variables for predicting 'hits' and their likely size were used. 17 variables are included in the hit model, 12 in the Netal model.

5.4. Risk Management in Poland

The implementation of the Risk Management Strategy within the whole Polish tax administration has been considered as an important factor in the process of modernization of the Polish tax administration.

Our targets were threefold:

– to minimize the total number of tax errors,

– to use the resources in our tax administration in an efficient way,

– to increase the level of compliance of the taxpayers.

The organisational structure consists of three different levels: National, Regional and local in the respect that all these levels are concerned with tasks and responsibilities connected to the risk model to some extent. Those three levels are necessary to be included whether work is related to nationwide actions or region wide actions.

At National level it is the Minister of Finance (MOF) that is concerned. At regional level there are Tax Chambers (TC). Finally at the local level there are Tax Offices (TO) and Large Taxpayer Offices (LTO).
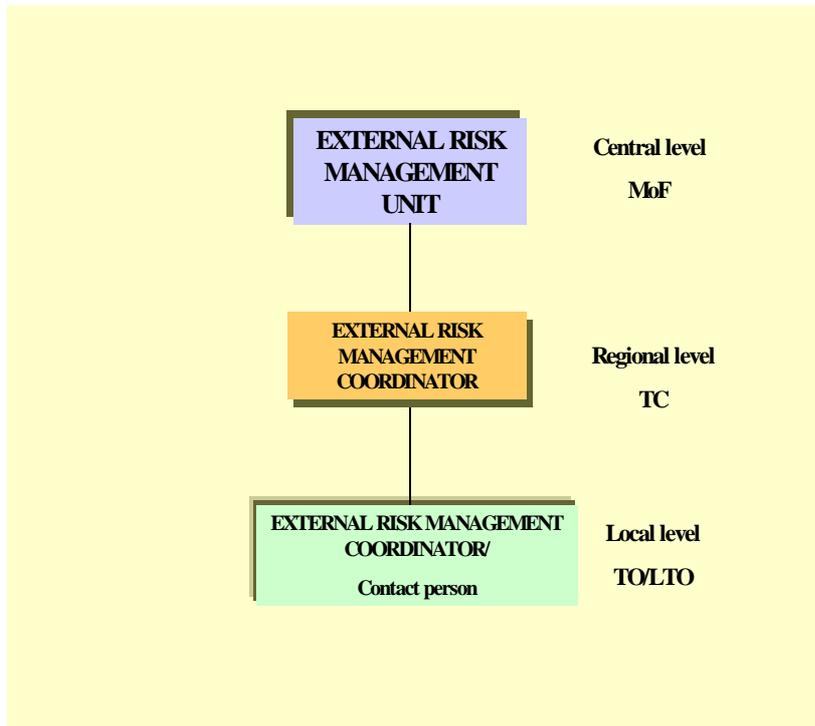
Contact person at TO/LTO gathers idea/risk areas by using his/her network (local organization of contact persons etc.) and sends them to appointed TC staff. TC staff compile regional preliminary proposal of risk areas and related actions to the TC management. TC Management takes decision on the regional suggestions of nationwide activities.

Then, the unit on MOF gathers suggestions from all 16 regions (TCs) and makes comparisons, merges and refines the description of risk areas. Next step is to analyze in depth and assess risk in each risk area. MOF unit uses its network, as reference groups in various subjects to get a proper opinion on the risk. The actual ability of performing activities in each risk area is considered in the phase of prioritizing risk areas.

Risk areas that are not suggested as nationwide activities for any reason may be regional activities so feedback to TC staff is necessary. The feedback to TC includes all suggestions from regions. This way all the regions have the knowledge of proposals from different TCs.

After the preliminary decision on nationwide actions the MOF unit produces an Implementation Plan for each risk area. The Implementation Plan describes in details how the nationwide actions should be carried out. The Implementation Plan is sent to TCs to gain the acceptance of proposed solutions because it is the final foundation for decisions taken by Management of MOF.

The details concerning the implementation are described in National-/Regional Implementation Plans. The regional plans will cover nationwide actions the region has agreed to contribute to, but also actions which are exclusively regional. The risk areas chosen – for elimination/reduction – together with related contributions of resources and frequencies of planned actions, e.g. number of field audits, are

described in Regional Compliance Plans. Those plans describe all risk area activities nationwide as well as regional that will be carried out in the regions. A summary of those is presented in the Regional Guidelines for the actual year. The nationwide commitment, with all resources and frequencies of planned actions e.g. number of field audits, divided in risk areas is described in the National Compliance Plan. A summary of those commitments is included in the National Guideline.

5.5. Risk Management in Italy for assessment purposes

The Central Directorate deals with tax assessment and fiscal examinations for Tax Assessment of the Revenue Agency.
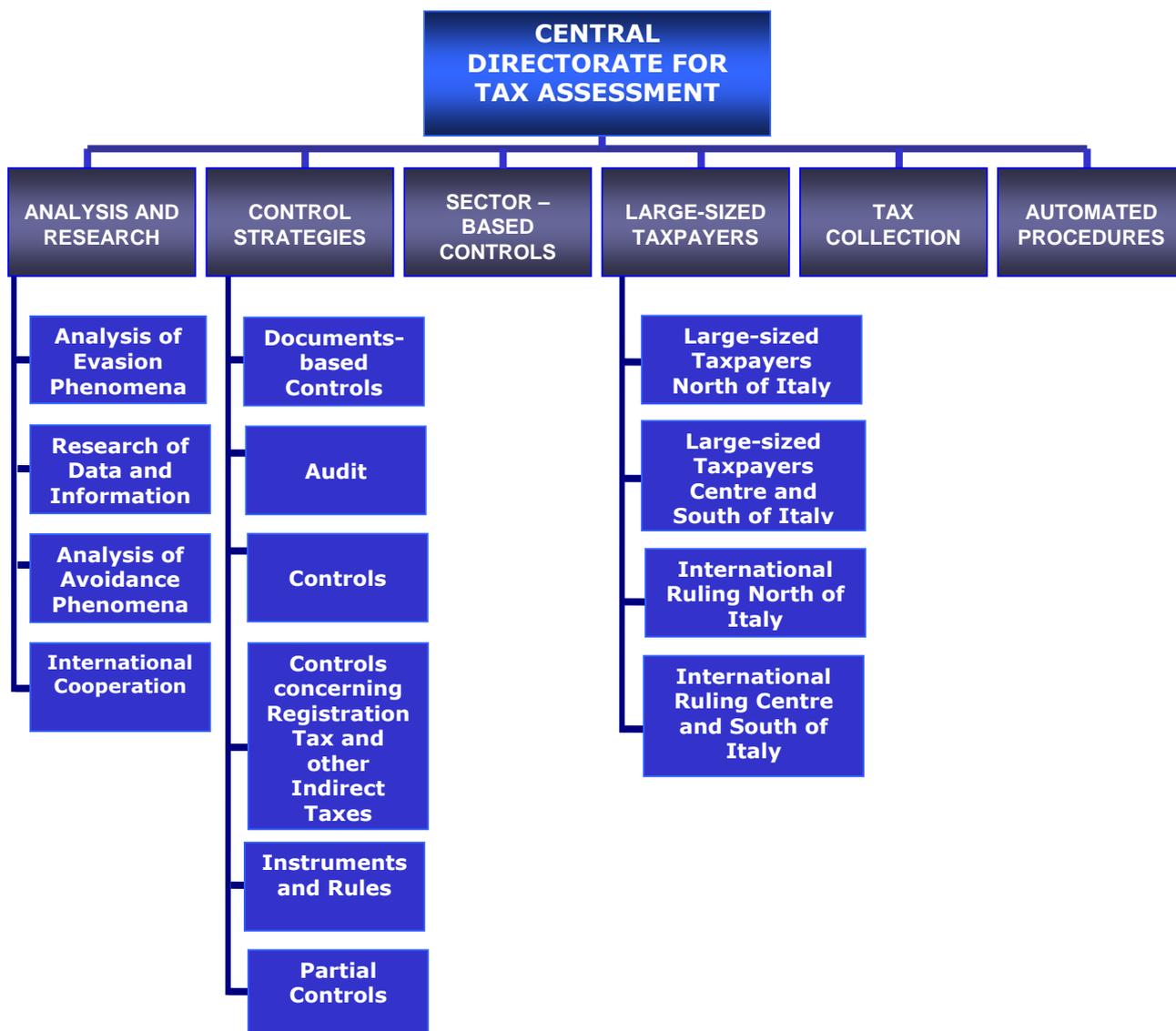
Three structures in the Directorate are mainly involved in the risk analysis aimed at the detection of tax evasion and tax fraud: the Analysis and Research Division, the Control Strategies Division and the Large-sized Taxpayers Division.

The Analysis and Research Division was set up with the purpose to develop risk factors and investigation paths that allow the early detection of evasion and fraud. The activities performed by the Analysis and Research Division is as follow:

– to analyse phenomena of non-compliance,

– to work out methods of investigations in specific sectors,

– to search relevant information in internal and external databases.

The *Intelligence* service of the Division plays a major role in establishing which are the main risk indicators and their priority, and checking the feedback of the controls at every stage of the action. All data needed is acquired and processed by means of internal databases (i.e. Total tax evaders, Analysis and selection of data, Early warnings, Nationals resident of countries with a preferential tax regimes, etc.). The data sources are the Tax Register and others available from other public or private bodies (i.e. Social Security agencies, Chambers of Commerce, credit institutions or other public and private institutions). Sources of information are also Internet and the newspapers.

Starting from different information sources and by the means of the integrated support of FISCO web site, the Division realises several methods of investigations that allow offices to improve the quality of controls carried out.

At regional and local level, an Analysis and Research *intelligence* unit was created with staff functions. These officers analyse information provided by the same structure at central level, but may carry out a specific "territorial analysis" also using their own data bases.

The Control Strategy Division is mainly charged with:

– planning the investigations,

– scheduling the annual plan of controls,

– the selection of taxpayers suspected of evasion,

– the coordination of controls.

In order to plan the controls due to be done, the Control Strategies Division starts by analysing information recorded in the Tax Register *(Anagrafe Tributaria)* and subsequently selects taxpayers considered at risk on the base of risk coefficients.

The Large Taxpayers Division plans and carries out yearly controls on major companies focussing on multinational groups and cases of transfer pricing, mergers, splitting and contribution of assets and exchange of shares.

5.6.   Risk Management in Austria

Risk Management is an essential part of the permanent fight against fraud in Austria.

Risk Management is centralised in RIA, the Risk, Information and Analysis Centre. It is a nationwide operating unit, only responsible to the Ministry of Finance (Anti Fraud Unit). RIA takes care of risk management in the areas of taxes and customs.
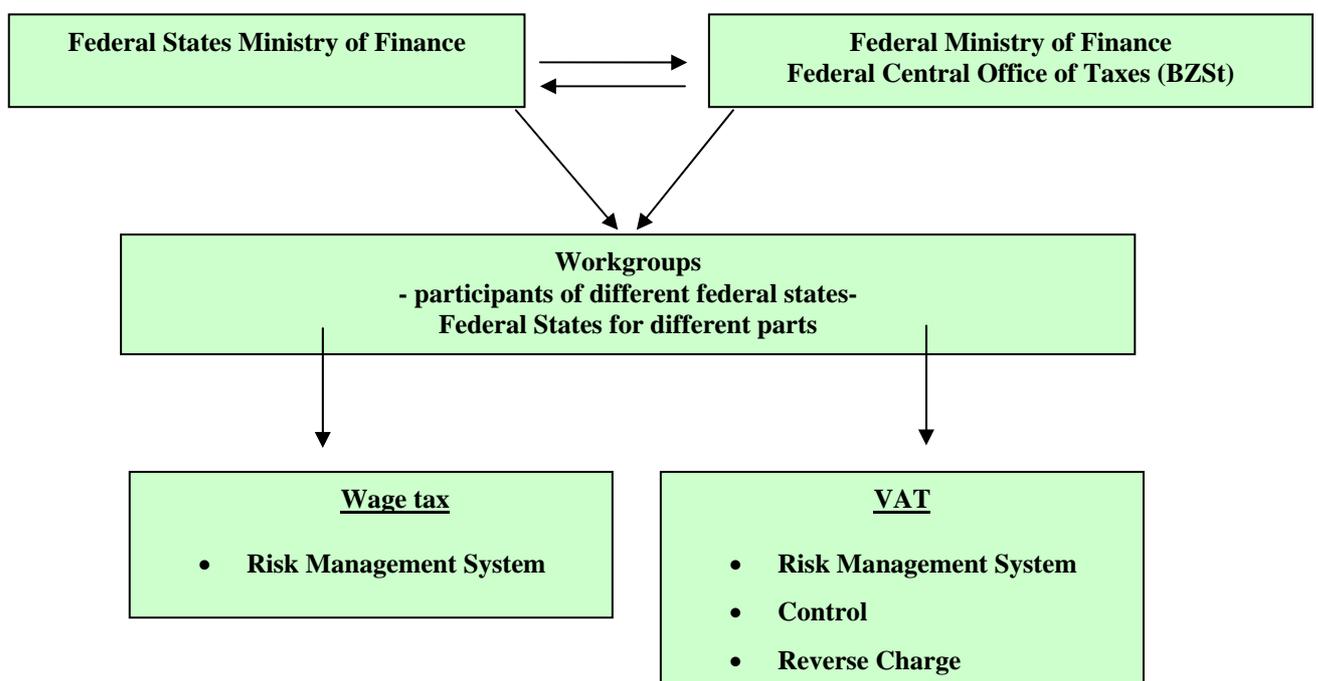
RIA's major responsibilities are:

– The risk management process.

– Gathering, exchange and analysis of information (including internet monitoring).

– Development of audit and control techniques.

– Case selection and audit plans.

– International cooperation in the above mentioned areas.

RIA is a unit that has been established in 2004 and its strategies and working procedures are being developed.

5.7. Risk Management in Germany

(1) Structure

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┌──────────────────────────────────┐         ┌──────────────────────────────────┐
│ Federal States Ministry of Finance │ ──────► │    Federal Ministry of Finance    │
│                                    │ ◄────── │ Federal Central Office of Taxes (BZSt) │
└──────────────────────────────────┘         └──────────────────────────────────┘
                    │                                        │
                    └────────────────┐      ┌────────────────┘
                                     ▼      ▼
                 ┌──────────────────────────────────────────┐
                 │                Workgroups                 │
                 │  - participants of different federal states- │
                 │       Federal States for different parts   │
                 └──────────────────────────────────────────┘
                       │                              │
                       ▼                              ▼
         ┌────────────────────────┐     ┌────────────────────────┐
         │        Wage tax        │     │          VAT           │
         │                        │     │                        │
         │ • Risk Management System │   │ • Risk Management System │
         │                        │     │ • Control              │
         │                        │     │ • Reverse Charge       │
         └────────────────────────┘     └────────────────────────┘
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(2) Process

To be able to encounter this development of constantly increasing cases with high risk effectively, the administration of finance permanent decides organisational, personnel and legal actions. Measures and suggestions are drawn up from different regular workgroups, in which experts of all federal states, the federal central office and the federal ministry are involved in principal.

All practical experiences based on the new measures are requested from the local and regional level authorities to be discussed in these workgroups continually.

(3) Measures (Wage Tax)

The tax administration is confronted with increasing number of cases, limited personnel resources and an advanced complexity of the tax laws. Because of this

is not possible to check every wage declaration intensively. So it is planned to establish an EDP-based risk filter system to distinguish between cases with a shortfall in wage taxes revenue and with low risk. Low risk declarations will be machine operated; declarations with higher risk will be personnel revised and some other declarations will be selected by random for personnel check.

(4)   Measures (VAT)

Already realised:

- an online data base with VAT fraud-cases (ZAUBER)

- a nationwide online name, address and VAT information system of all registered taxpayers (LUNA)

- qualified new registrations for VAT by using uniform checklists

- a federal central office (KUSS) to coordinate important VAT fraud cases like carousel cases with corresponding special VAT-Units in all federal states

- a federal central unit to analyse non registered commercial activities in the web area (e.g. eBay) using the web crawler system Xpider

- reverse charge taxation for different sectors (for example: construction business)

- a legislative basis for unannounced audits

- EDP-risk management systems (RMS)

Among these measures the tax authorities of the federal states are going to establish a uniform EDP risk management system (RMS) as soon as possible in every federal state.

The primary goal is to identify VAT cases with high risk in a methodical way. To be able to deal with every kind of risk, 3 different components were developed, tested and used in practice in some selected areas for some time. These risk management systems are based on a high degree of automation support because of the masses of information and complex facts it has to deal with. The proceedings have different starting points and respectively strategies. Although these components are different in conception and technique they complement one another in an efficient way. One of the components is a strictly rule based decision system, the others based on neural networks (the way of working up information with processes of learning) for analysing risk and pattern recognition.

(5)   Rule based decision system

The goal is to find out conspicuous VAT-declarations automatically and to create corresponding hints for the staff.

(6)   Neural networks

One of these neural network systems is focused on identifying carousel transaction cases. The other neural network system wants to filter risky VAT-

declarations with moderate amounts of VAT due. The existing data (basic information, detailed data of the VAT-declarations, assessed taxes, payments) in the present storage systems builds the basis for these uniform risk management systems.

In future further data sources have to be consulted to get better purposeful hints.

5.8. Risk Management in Greece with respect to tax audits

The Greek Ministry of Finance and Economics is scheduling the development of an Integrated Information System for Audit Services (System), with the aim of managing the whole audit process in an integrated manner.

The System is aiming, amongst others, to cover the "life cycle" of each audit case by the use of new technologies. So from an operational point of view, the System will introduce a mechanism under which the audit procedures will be managed by the use of available information, audit support tools and proper human and technical resources. All system-users will be selected after an evaluation process amongst central and regional service units.

The central operational unit of the System will be constituted by a mechanism through which the selection of cases will take place, by the use of available data. This unit will be divided into the sub-sections of Risk Analysis and Case Selection. The proposed Risk Analysis system will refer to the evaluation of the available data with the aim of selecting cases to be audited. Data recovery will be facilitated from the data warehouses of the Ministry of Finance and third parties. Internal information produced in the course of operation of the System will be also taken into account. The data collected will be examined and aggregated in such a way that it will become suitable for further analysis by the users in their decision-making. This will be an on-going process, during which filtering, combining and merging of data from different sources will take place. By the application of rules of compliance a number of cases will be shorted-listed and ranked.

The Risk Analysis model will be planned in so that it can be re-modelled on a continuous basis and be in line with the specialised needs of audit units, changes in the legal framework, experience gained by previous audits and in general any knowledge acquired even from *ad hoc* cases. The decision as to which cases are finally sent for audit will be made by a specialized team of users through a semi-automated process, during which further analysis will be performed.

Management of selected cases will apply electronically and further programming for auditing them will take place with an estimation of the time needed and the cost of each audit task by means of human and technical resources. Strategic planning will be taken into account at this stage.

An Electronic Audit File (the File) of each case will be created in the course of the whole process, in which a historic review of each case will be available. The File will be automatically updated by the audit findings and any relevant additional information.

There will be provisions within the System to allow auditors to have access to the File and enable them to retrieve any information related to the risk picture of the taxpayer, outstanding economic figures of the businesses, best audit practices which have been used in similar cases, etc. By the completion of the audit an electronic report is generated and sent to the competent units, so that any due taxes will be assessed and collected.

Audit results will be used for the evaluation of the audit mechanisms and the inspection of each audit service. In particular time limits which were initially set, personnel engaged in the activity and methodologies used will be scrutinized so that the cost-benefit can be measured and new proposals will be made for future improvements.