

The taxpayer and the electronic age

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Summary

With the rapid development in the modern technologies of information processing and communication and the extraordinary increase in the importance of a global information and communication network, the technical foundation has been laid for the Information Society of the 21st century. The result of these developments involves all of the worlds economies and affects not only the national and international competitiveness of companies and nations but also the taxpayers, their tax advisors and the taxation authorities in Germany and Europe.

The upgrading of the taxation offices' infrastructure with modern technology has started and is still in progress. To realise the vision of a fully electronic paperless tax declaration with electronic signature, the taxation authorities are striving to improve the efficiency and timeliness of tax administration and assessment, to reduce the processing time for each declaration, to reduce the error rates and to achieve a more uniform taxation assessment. The technologies and high capacity communication networks required to achieve these aims are already available and will become even more efficient in the future.

The first steps in this direction encompass the further expansion of the database systems in the taxation offices to achieve improved obtainment of information and the extension of the communication possibilities for exchanging information with national and international partners as well as between the taxation authorities. Solutions are also necessary which are appropriate within the framework of the international double taxation agreements, in particular the development of secure forms of data transmission for the processing of taxation assessments.

The procedures for the electronic transmission of tax declarations and the response with electronic assessment data are the first encouraging steps in this direction. Safeguarded legally by the law covering digital signature, the implementation of procedures including the establishment of certification authorities, set up by the private sector but supervised by government, and the use of the associated cryptography will continue to provide the guarantees of quality embodied in the terms correctness, accuracy and security in data processing systems that the taxpayer, his tax advisor and the taxation authorities rely on.

For the general public to accept the challenges and technical possibilities in the century of telecommunication, the members of the taxation consulting professions must be integrated into the development of the future to ensure the rapid progress of such projects as the compressed tax declaration.

I. INTRODUCTION

Through the extraordinary pace of development in information and communication technology and the rapidly increasing importance of a global electronic network, the formation of an "Information Society" with completely new perspectives has gained impetus, especially in recent years. The development and effective application of these new technologies is going to play an increasingly significant role in the national and international competitiveness of companies and nations. This will involve all taxpayers, their tax advisers and the tax authorities.

The tax authorities have been rapidly upgrading and modernizing their IT and communications equipment in recent years, to utilize the potential of the new technologies. The aim is an efficient, timely and uniform assessment of taxes through officials using personal computers and decentralized mainframe computers. This integrated and comprehensive assessment is close to realization. The tax authorities' concept foresees workstations processing tax declarations in a single transaction, from the initial input of data from the taxpayer's return to the issuing of an assessment notice, taking the pertinent regulations and taxpayer's files into account.

In this respect, considerable progress has already been made through the transfer of data files on electronic storage media to the tax authorities and even more recently, through the direct transfer of files from the taxpayer and his tax advisor direct to the tax authority's computer, using modern communications networks.

The economic and social implications of these developments are clear. The integrity of the tax-paying citizen as well as the secrecy and security of his data are essential prerequisites and must all be guaranteed. These are essential prerequisites for the social acceptance of the information and communication technologies, and for mastering the economic and social challenges as well as the consequences of the Information Age. These requirements are far more extensive than what is generally understood by the term "electronic taxation". A legal basis has been established, initially with the enactment of the Telecommunications Act and the Information and Communication Services Acts of 1 July 1997, Part of this is the Digital Signature Act, which took effect 1 August 1997. It is supplemented by the Digital Signature Ordinance specifying the security measures for the certification offices provided for by this Act.

II. EXCHANGE OF INFORMATION BETWEEN TAX AUTHORITIES

A. Legal basis

The legal basis for the international exchange of information with Germany is established by provisions relating to disclosure of information in the OECD Model Convention; mutual assistance agreements, Germany's EU Administration Cooperation Act (EUAC), Para. 117 of the Tax Code with respect to informal cooperation and the EC Directive on administrative assistance in indirect taxation.

The EUAC, which regulates mutual cooperation in the areas of direct and indirect tax, does not restrict more extensive exchanges of information provided for by international agreements and the domestic legislation of other Member States. Germany has mutual assistance agreements with Finland, Italy and Austria. Agreements have been signed with Denmark and Norway to implement the exchange of information provisions in the tax treaties. The customs agreement with Norway also the exchange of information.

Tax treaty provisions make a distinction between "major" and "minor" information exchange. Under "major" information exchange, the inquiring state is permitted to request all the information that it needs to levy its taxes. However, under "minor" exchange, the right to information is restricted: only the disclosure of the information necessary for applying the tax treaty correctly to the levy of taxes under the relevant tax treaty is permitted.

B. Types of information exchange

The extent of information exchanged needs to be differentiated between information requests for individual cases, spontaneous information exchanges and automatic exchanges.

The number of exchanges of information relating to individual cases and spontaneous information exchanges is growing steadily, but in absolute terms, is still relatively small. The spontaneous exchange of information with the Southern European countries of Italy, Greece, Spain and Portugal has only been possible since 1994, although exchange of information to individual cases, especially with France, the Netherlands, Austria, Italy, Denmark, Great Britain and Belgium has become normal. Nevertheless, in 1996, the German tax authorities made less than 300 such requests to foreign authorities, compared to the more than double that number of requests they received during the same period.

The volume of spontaneous information exchanges is now quite substantial. In 1996 Germany received (without requesting them) more than 200,000 information exchanges, the majority from the United States. The German tax authorities tend to be more cautious about making spontaneous disclosures.

The automatic information exchange is particularly significant in the context of electronic data transfer. Its distinctive feature is that it takes place continually, without an exact date for information being requested. The taxpayer is not informed when information exchange takes place automatically.

Automatic information exchange under the EUAC is permitted for the following areas: the hiring of labour, avoidance of double taxation on tax reductions conceded or on tax exemptions, comprehensive registering of income and assets, input tax credits for non-residents and VAT-relevant delivery of new vehicles within the European Union. A (simple) reciprocal agreement is all that is required. The first agreement of this kind was made between Germany and the Netherlands on 3 December 1997.

Information is also exchanged automatically, relating to professional fees (especially for foreign artists); the registration procedure for the exemptions of fees as provided for in the tax treaty (Section 50d(3) Income Tax Law); the contents of refund applications and the procedure for refunds for foreign artistes and sportsmen as covered by the refund procedure (Section 50(5)(3) Income Tax law). Article 26 of the tax treaty with the United States provides the legal basis for a further automatic exchange of information, in relation to refunds of German taxes on investment income.

In order to check the taxation of goods subject to excise duty, a centralized electronic tax database for tax control procedures has been established in Stuttgart, under Section 2a of the EUAC. This central office administers the permits for the tax-free dispatch and receipt of goods subject to excise duty (tax warehouse) and the data that have been made available by the tax authorities of the other Member States.

A multilateral exchange of information has been in existence since 1 January 1993 relating to the taxation of turnover on transactions in the European Union. This provides for the exchange of VAT identity keys, company addresses and data in registration summaries, within

the VAT Information Exchange System (VIES). Its legal basis is the EU cooperation legislation in each Member State.

The automatic exchange of information will expand in the future. Information can now be exchanged and processed within an acceptable time frame through the advantages offered by modern methods of data transfer. Automatic exchange will also be important to the taxation of the electronic marketplace.

III. EXCHANGE OF INFORMATION BETWEEN TAX AUTHORITIES AND THE TAXPAYER

A. Electronic data collection methods

The German parliament has paved the way for the organizational and technical realization of the transfer of data in electronic form by implementing the Ministry of Finance Directive on the Submission of Taxation Returns on Mechanically Utilizable Storage Devices (hereinafter: STADV) into the Tax Code.

Correctness, accuracy and security are the synonyms for quality in data processing. In the tax consulting profession, particular emphasis is placed on error-free and secure data processing systems. Clearly defined interfaces have been developed in cooperation with representatives of the tax consulting profession, the tax authorities and data processing enterprises, such as DATEV, the data processing agency for the tax consulting profession (hereinafter: DATEV). For electronic tax data to be received, the necessary infrastructure has to have been created by both the tax authorities and the service agencies and most importantly, the user has had to have an open attitude towards the new technology.

Implementation of the STADV in the Tax Code means that taxpayers, whose accounting is carried out by a reliable data processing service agency, may authorize certain information relating to their tax returns to be sent directly to the tax authorities on electronic media.

The paper form filled in with tax data by the taxpayer and sent to the tax office is now outdated. Today, it is normal for a third party submit this data on an electronic storage medium. Approximately 3 million preliminary turnover tax returns were forwarded in electronic form by DATEV in 1998.

The following is an example of how the procedure works for transferring electronic data to the tax authorities:

- the taxpayer must first, but only once, register with his tax office by completing and signing the relevant official form "Erklärung zur Übermittlung von Umsatzsteuer-Anmeldungen gemäß para. 2, nr. 2 Steueranmeldung-Datenträger-Verordnung (STADV)". This guarantees that the data-processing company is authorized to submit the client's tax data. DATEV defines a password to protect the data, so that it can only be processed if accompanied by the password;
- the company inputs the data from the taxpayer's transaction documents locally. Before transmission, the values for the preliminary turnover tax returns are consolidated (or other values, depending on the type of tax and tax procedure) and the basis for the consolidated figures can be re-constructed from the accounting system on demand. All of the data prepared for transmission is recorded on a schedule, together with planned dates for forwarding to the tax authorities;

- the taxpayer's data is electronically transmitted together with the password (which has been defined for the interface between DATEV and the user at the computer centre) to the DATEV computer centre (RZ) via its own secure network;
- at the centre, the transactions are checked and processed in accordance with the stored processing rules. The correctness of the identifying numbers for the tax authorities and the taxpayer, being the most important information, are accordingly subject to rigorous control. Depending on the type of tax and tax procedure, the values for the preliminary turnover tax returns are consolidated before transmission; the basis for the consolidated figures can be reconstructed from the accounting system on demand. All of the information prepared for transmission is recorded on a protocol, together with the planned forwarding dates;
- the dates for the centre to forward the data to the tax authorities are set for the work day preceding the tax return deadlines, with a five-day period of grace for taxpayers using this procedure. To give an example, the deadline for the January 1998 data is 17 March 1998. The period of grace enables the user to input transactions and prepare the reconciled figures beyond the usual deadline.
- the centre prepares for forwarding the taxpayer's data to the tax authorities by sorting the information according to receiver's location and by preparing delivery documents with control totals;
- the tax authority receives the data with a defined record structure on electronic media. The data is then allocated by the recipient tax office to the correct taxpayer by using the identification numbers for the tax office and the taxpayer's identification numbers.

B. Electronic delivery of tax returns to tax authorities

In the past, the exchange of data relating to tax returns between the taxpayer and the tax authorities was predominantly in paper form. This has changed. In recent times, the electronic transmission of tax returns has become more prevalent. The tax authorities, wishing, for example, to avoid the considerably inaccurate input activity associated with paper tax returns have come up with the alternative of electronic data transmission (EDT).

The basic prerequisite for EDT is that the organizational and technical infrastructure necessary for processing be created by each of the Länder tax authorities, for example, by equipping their tax offices with workstations to enable the tax officials to input the necessary data.

Direct participation in EDT is not (yet) possible for the individual taxpayer (whether natural person or company) because of the problems of data security and the costs associated. Permission to participate is only granted to particular data processing agencies (currently only DATEV). One way for the taxpayer to participate in EDT and to benefit from its advantages is through the tax adviser. He is supported by DATEV, the data-processing organization of the tax consulting profession.

In Bavaria, North-Rhine/Westfalia, Rheinland-Pfalz, Saxony, Saxony Anhalt and Thuringia, the electronic transmission of income tax returns has been in use for a long time (the start was in Bavaria in 1994). Up to May 1999, over 530,000 income tax returns had already been electronically transmitted. The electronic transmission of trade tax and turnover tax returns has been in use since 1997 in Bavaria and since 1998 in Saxony, Thuringia and Saxony Anhalt. Electronic transmission of the data for all three types of tax was introduced 1999 in Hessen Schleswig-Holstein and Rheinland-Pfalz.

The procedure for the submission of income tax returns using EDT is as follows:

- the tax adviser processes his client's income tax return as usual by using the income tax programs from DATEV. A few extra data inputs are necessary for EDT (e.g. the identifying number of the tax office) and to produce the taxpayer's name, identification number and a randomly generated tele-number on each page of the printed form that accompanies this process;
- the tax consultant transmits the data to the DATEV computer centre, with the deadline for its electronic transmission to the appropriate office of the tax authorities;
- the DATEV computer centre transforms the data into the input structure required later on by the software at the tax authorities and organizes both the temporary storage of the data and the supervision of deadlines;
- on the relevant deadline the data is electronically transmitted with the taxpayer's identifying number and a tele-number to the appropriate tax authorities (regional finance office of the tax authority). (The data is allocated to the correct tax office by the identifying number given by the tax consultant);
- the data is checked and then passed to the relevant tax official for processing. At this stage, the data cannot be processed further until the tax official receives a printed tax return form from the taxpayer, which includes the matching tele-number;
- parallel to the EDT process, the taxpayer must still submit a signed official printed tax return with the necessary transaction documents to the tax authorities. The form (in black and white on DIN A4 paper) is printed either at the tax consultant's office or the DATEV computer centre and has a randomly generated tele-number on each page in addition to the taxpayer's name and identifying number;
- when the tax return form is received by the tax official, he can begin with the processing of the tax assessment. It is only at this point that he gets knowledge of the tele-number, which he needs to obtain access to the electronically transmitted data and for it to be viewed on his workstation. The tax official cannot, however, see the data without the input of the correct tele-number; and
- after checking the figures and possibly correcting those for non-acceptable claims, the tax official generates the assessment and closes the computer file.

Assessment data for the returns sent in electronically is transmitted back to DATEV only (i.e. not to the tax consultant), provided the taxpayer has given additional consent to this procedure on the tax return. Each assessment electronically transmitted by the tax authorities to DATEV has a maximum of 150 values (= results of the tax assessment e.g. amount of employed income, amount of income related expenses, special expenses, amount owed/tax refund). In addition to these values there will also be transmitted by the tax authorities the provisional and conditional memo items and the explanatory notes of the tax official. DATEV makes a comparison of the assessed data and the values that were calculated from the tax return still stored in the computer centre. These compared values, together with the accompanying text from the tax office, are electronically transmitted to the PC in the tax consultant's office.

The tax office also prints out a paper assessment. This still has to be sent to the authorized tax adviser. Tax assessments on paper are still the only legally binding form as the electronic transmission of an assessment does not satisfy the conditions for acknowledging the legal responsibility for delivery.

The potential for great rationalization made possible through the electronic transmission of tax returns will only be realized when tax assessments can be returned by the tax offices to tax advisers via EDT.

C. Digital signature

In conventional correspondence, each document exchanged usually bears the personally written signature of the author. This serves as a form of authentication for the recipient to check the document's integrity. In the electronic exchange of documents, the use of such a conventional signature - perhaps as an inserted graphic - is worthless, since such signatures can be copied repeatedly. Digital signatures produced by cryptographic methods are used to compensate for this weakness in security.

The digital signature process involves a transformation of the document that is going to be electronically transmitted through use of a complicated mathematical algorithm based on the private signature key, accessible only to the document's author. The resulting digital signature for the document cannot be re-created by anyone other than the owner of the original signature key. The authenticity of the document (i.e. its integrity and its attribution to its author) can be checked with a public verification key, which may be known to anybody, that is the match for the signature key.

The document's recipient will, of course, need to be certain that the verification key it receives electronically is genuine, that it attributes the signature key to the document's true author and that it has not been forged. Without the introduction of supplementary measures, this verification method will only work for electronic document exchange between partners (such as DATEV and the tax authorities), who know and can exchange verification keys with each other through channels outside of the electronic communications network.

If it were now a requirement for every taxpayer to transmit his own tax declaration electronically, the tax authorities would need to be certain of having available for each taxpayer an individual verification key attributing each declaration to the proper taxpayer. Otherwise the danger could arise that criminals would be able to submit tax returns for third parties. Alternatively, a taxpayer could use the possible uncertainty to refute the authenticity of his tax return.

An additional feature is needed in direct electronic document exchanges between taxpayer and tax authority and in all other instances that take place in truly open communication (including exchanges between partners who know each other only through the electronic media) is required to solve the problem of the uncertainty over a verification key attributing the document to its true author.

Generally accepted as the solution for the certain attribution of the document to its true author is following method: The matching verification key is to be transmitted with the digitally signed electronic tax return (or with other electronic documents) accompanied by an extra "certificate".

This certificate, which authenticates a digital signature, would serve as a guarantee for the genuineness of the verification key. The true identity of the document's author would become certain through its verification of the identity of the owner of the signature key used for the document's digital signature. These "certificates" may be thought of as the digital analogy to the conventional documents of identification (ID card, passport). They can, of course, be copied at will and attached to the electronic mail. They are, however, to be digitally signed by a registered certification authority, which in turn will authenticate them.

The Signature Act (effective in Germany from August 1997) lays down the necessary conditions under which digital signatures can be used safely. In particular, the Signature Act regulates the establishment of certification authorities, which are to be organized by the private sector but supervised by government. Not covered by the Act, is the extent to which digital

signatures can be legally recognized in the same way as handwritten signatures on paper documents; this will be regulated by the provisions of existing relevant legislation.

The Signature Act includes other features of interest to the taxpayer in the Electronic Age. It permits possible certification, not only of the signature key owner's identity, but also other attributes, e.g. professional qualifications. This would make certification of membership of the tax consulting profession possible.

The current provisions of the Signature Act are not satisfactory, in particular for professions where membership of a professional body is mandatory. The certification authorities under the Act are not compelled to authenticate professional qualifications in their certification of digital signatures. The professional groups affected in Germany (tax advisers, lawyers, certified public accountants and notaries) are working together to improve this situation: the concept of certifying the professional attributes of the signature key owner is initially to be tested with a practical trial. The results can then be used to determine further measures.

D. Attachments

All modern electronic mail systems include a feature that permits the user to attach other documents to the document being sent (analogous to the usual enclosures in conventional correspondence). Although there are some restrictions on the types of attachments that can be sent through the gateways between different e-mail systems, one may assume that in the foreseeable future, being able to transmit attachments in any electronic form will become quite common. It should by then, for example, be possible in electronic form to both prepare and attach a complete set of transaction documents as enclosures to an electronic tax return.

The fundamental problem associated with the preparation of transaction documents for electronic tax returns is how the genuineness of the electronic invoices can be validated. A distinction has to be made between transactions in electronic form initially, e.g. where invoices received are originally in electronic form and those processed from paper documents in the conventional manner.

In the first case, the solution is simple - if an invoice has an (official) digital signature from the proper authority, there will not be the slightest doubt as to its authenticity. (This has not yet been provided for in existing legislation; there is a need for revision). In the case of transactions originating in paper invoices, the solution is somewhat more difficult. Electronic photographic images of paper documents can be formed using scanner technology, but the possibility of manipulation of the original document (or invoice) cannot be excluded. Could digital signature provide a form of validation, which would authenticate the scanned image to the same extent as having a handwritten signature on the original document?

The electronic image would be protected from subsequent manipulation if it were digitally signed. However, the person creating the scanner image would also be responsible for its digital signature added during the scanning process. As there would still be no certainty of excluding manipulation of the original document, the inclusion of a digital signature at this point would not serve to validate the electronic document. Its digital validation would remain dependent on the paper document's author. In most cases, the process of having to go back to this originator for his digital signature would be far too unwieldy and impractical.

With the necessary infrastructure, a document originator can initiate and validate the document in electronic form.

One way out of the dilemma posed by transactions originating in paper form would be the electronic accreditation of electronic images by a competent person. This competence could

be reserved for particular professional groups (such as tax advisers practising as such). The accreditation process could work as follows and as such would be a practical application of the integration of professional attributes in the certification of digital signatures: the tax consultant checks the authenticity of the original paper documents and compares these with their electronic images. If they match, he can accredit the image with his own digital signature. As this includes his qualifications, which in turn satisfy the requirements for a competent accreditator, the electronic image of the paper document can be officially recognized as authentic.

E. Tax returns on paper and electronic tax returns

Section 150 of the Tax Code stipulates the form and content of taxation returns. Under para. 1, subpara. 1, tax returns must be submitted on official printed forms.

Para. 6 of Section 150 of the allows the Federal Ministry of Finance, with the consent of the Upper House of parliament (Bundesrat), to enact decrees simplifying the automated procedures for levying taxes and provides for the transfer of tax data, either completely or partly in electronic form, either on electronic storage media or via electronic transmission. On the basis of this authorization, the "Decree on the Submission of Taxation Returns on Mechanically Utilizable Storage Devices" (STADV) was enacted.>

This Decree enables computer centres, like DATEV, to transfer tax data, either by electronic storage media or over a network. This makes a second input of the data superfluous and thus removes a source of error.

The necessary conditions for using the data transfer procedures are:

- the data processing company has been authorized to use the data transfer procedure;
- the data transfer fulfils all of the specified requirements; and
- for tax data submitted by the data processing agency to the tax authorities on electronic storage media, the taxpayer has submitted to its tax office, the signed tax return on an official form including a signed confirmation that all documents and information necessary for the tax assessment have been given to the data processing company and that the company is authorized to submit its tax return on its behalf.

In a Federal Ministry of Finance notice of 14 November 1996> on the principles of the use of official forms for taxation returns, the following forms are recognized for the submission of tax returns in accordance with Section 150(1) Tax Code:

- official forms issued by the competent tax authority (official tax office form);
- forms that have been produced from a sample official tax office form using printing, copying or data processing methods, provided they satisfy the following requirements:
- text, format, number and order of pages must be identical to the official tax office form (minimal differences in line spacing, spacing between letters or in the paper format and replacing the official green print with grey tones are permitted).
- they must last for at least 15 years; and
- they must be printed or be legibly written on both sides

F. Future prospects

A Federal Ministry of Finance Draft on "Principles for the electronic transmission of tax declaration data", covering the electronic transmission of tax return and tax assessment data between taxpayer and tax authorities, states that a tax declaration within the meaning of Section 150 Tax Code must be submitted on an official form. The electronic transmission of data to the tax authorities for its tax return does not replace the submission of an official tax return. Furthermore, as an electronic transmission is seen as merely making the data available, it cannot comply with the deadline for submission of the tax return.

A further Draft from the Federal Ministry of Finance on the same issues states that the taxpayer will be permitted to submit its tax return to the tax authorities by electronic data transmission, provided the electronic form and data satisfy the earlier conditions and provided software is used for both transmitting the data (tele-module) and for printing the tax return at the tax offices.

G. Security issues

Frequently cited as the decisive reason for not using electronic media for trade or legal relations is doubt about trusting sensitive data to the non-transparent system of open electronic networks. This anxiety is anchored in the fact that traditional methods of protecting data are perceived as having been successful in guarding against unwanted intruders and that the measures, developed for individual companies with internal networks and channels, lose their effectiveness in the world of the interwoven open networks.

Correspondence by electronic mail means that neither sender nor recipient can predict in which channels and network nodes intermediate storage occurs during the transmission of their messages. In this sense, the transmission of an electronic message in uncoded text is comparable to sending a postcard through conventional mail.

Modern cryptography offers a well thought-out way of protecting data. It is no longer necessary to protect electronic mail from unauthorized access. The emphasis is on making sure that only the intended recipient can interpret a message. To this end, electronic mail is now sent in coded form. Unwanted "spies" who have managed to obtain access to the data, by whatever method, will only see a meaningless string of characters that they cannot possibly interpret.

It is now widely accepted that it is amateurish to try to develop a coding system on one's own and to try to keep it a secret; more security is guaranteed by using a procedure that has been publicly developed and critically examined by industrial and scientific establishments. These procedures do not present a security problem because the critical factor is not the mathematical algorithm, but the parameter of the individual specific "key" that is used in the calculation. Without this, decoding of the text is practically impossible.>

Governmental policy (of varying strength in different countries) would like to see the use of cryptography either forbidden or at least restricted. Science and industry have, however, almost unanimously pointed out that governmental regulation would prove to be a disadvantage to the wrong people. While criminal organizations have the technical capability to outflank government restrictions, such restrictions could expose the law-abiding citizen to new sources of danger. This would undermine the public confidence in the electronic media.

IV. PROTECTION OF THE TAXPAYER IN THE ELECTRONIC AGE

A. Ability to dispute data provided by third parties

The new information and communication technologies have had a considerable effect in numerous vital areas in shaping today's Information Society. This has brought advantages, particularly noticeable in the development of electronic commerce. It has also brought disadvantages, such as those apparent from the amount of data now available to the tax authorities.

The protection of personal data requires improvements in the establishment of identity, in the measures against the misuse of data and communication processes and in the construction of transparent and comprehensible security features, such as firewalls and digital signatures. Action is also necessary to improve the administration of access codes and to avoid the transmission of declarations of intent or other documents prone to error. One hundred per cent security in electronic systems is, of course, not possible. Nevertheless, the improvements mentioned above must be taken seriously and developed further. The promotion of user information, detailing measures of self-protection, must also be encouraged.

Potential dangers also exist through the monitoring of data movement in the network or by the collection and misuse of information pertaining to behavioural profiles and consumer patterns. These must be prevented through web suppliers, whom the user supplies with information, using coding processes and computer programs aimed at requesting the minimum of personal information and establishing an obligation to inform the user of stored personal data.

The validity of data from third parties is very important to the taxpayer's rights in tax authority determinations. This data can cover the registration of citizens or businesses (Sections 134 - 136 Tax Code); the designation of creditors and recipients of payments (Section 160 Tax Code, provision of obligatory information (Section 93a Tax Code) and, in particular, from control documents, obtained during external auditing of another taxpayer by a tax office (Section 194(3) Tax Code). Additionally, there are also the spontaneous information exchanges from abroad, received in accordance with Section 117 Tax Code and guidelines such as the EC Administrative Assistance Directive.

It should be noted that the principle of judicial investigation applies to German tax legislation in accordance with Section 88 Tax Code. The taxpayer must be given a hearing (Section 91(1) Tax Code) before the administrative decision of the authority comes into force for which he is obliged to supply information (Section 93 Tax Code).

The taxpayer's right to a hearing also grants him the right to discuss all of the data from third parties with the tax authority. The volumes of documents and data provided by third parties to the tax offices have increased so much that the number of cases where the documents do not agree with the facts has grown dramatically. For this reason, it is very important that the taxpayer be given the chance to clear up any uncertainties before the administrative authority's determination has legal effect.

When an onerous administrative determination is made, a highly developed system of legal protection comes into play. Under Article 19(4) of the Constitution, every administrative measure is subject to judicial review, i.e. the taxpayer has the legal right to contest the authority's decision, firstly in an extra-judicial preliminary hearing, then in a trial either before the regional tax court or, in the final instance, before the Federal Tax Court.

The legal protection available to the taxpayer represents a significant constitutional strengthening of the taxpayer's position, especially as a countermeasure to the state's hunger for

information. Additionally, the subsidiary privacy laws of the Federation and individual states also safeguard the right to informational self determination. It will still be necessary in the future to regulate the question of liability and the burden of proof.

B. Ability to dispute alterations to electronic files made by the tax authorities

In as far as the STADV has already made it possible in Germany for data for income, trade tax and VAT declarations to be submitted to the tax authorities by EDT, so are the tax offices just as committed to critically assessing this information in the same way as tax returns submitted on paper. There does not appear to be a difference in the way the data is evaluated.

The submission of the data electronically is, of course, dependent on the taxpayer, and on the data processing company fulfilling the necessary conditions for using this data transfer procedure. There should not be any resulting material deviation in the tax assessment.

The tax authorities may decide, on examining the submitted data, that changes are necessary. This is the result of the principle of judicial investigation in Section 88 Tax Code. If the tax authorities deviate from the submitted figures, including those submitted electronically, the person involved must be given a chance to make a statement about the relevant information (Section 91(1) Tax Code). The principle of judicial investigation applies to both figures submitted on paper and figures submitted electronically. If, after examination, the tax office makes changes it considers necessary, the taxpayer has the right to be given a hearing and to make a statement about information relevant to any figures that deviate from the declaration (Section 91(1) Tax Code). (Although it is possible to dispense with this hearing in special cases, this is a general rule.)

The taxpayer also has available all of the legal protection of the judicial review procedure that is a normal part of the tax assessment.

C. Privacy and the use of data by the tax authorities

In Germany the principle of the privacy of tax information is a fundamental right under Section 30(1) Tax Code. This expressly states that a tax official violates the law if he discloses a taxpayer's circumstances or business or company secrets to an unauthorized third party or if he exploits this information, or if he accesses data in an automated process without the required authorization to do so. This basic right is supplemented with a statute regulating specific protective technical and organizational measures for automated data retrieval of tax information and with Section 30a Tax Code, which guarantees privacy for bank customers.

Unfortunately, other legislation considerably undermines the privacy of tax information. For example, Section 30(4) Tax Code allows the disclosure of acquired information where expressly permitted by a law, or when the party involved consents, or where a compelling public interest is at stake.

Furthermore, there are now many rules for exceptions, some of which have been confirmed by the Constitutional Court. These have so undermined the whole of the legislation on privacy of taxation information that the concept hardly exists in Germany any more. The exceptions include the following:

- those provided by Section 31 Tax Code. Basic tax data and information that can be used to control illegal employment and the misuse of public benefits can be forwarded to public

corporations or the social insurance authorities. The Federal Labour Office and the tax authorities to pursue harmonized objectives;

- those provided by the social security laws; and
- those resulting from all of the connections between the tax authorities and other authorities, such as the authorities dealing with foreigners, with criminal offenses; the law courts; the authorities dealing with commercial concerns; professional bodies; the environmental protection authorities and the Registration Courts.

Although the use of taxation data for statistical purposes is prohibited it could nevertheless be achieved through appropriate legislation.

The principle of privacy of tax information also includes the laws that grant the right of refusal to give information and that prohibit confiscation. The tax authorities are not allowed to use any information they obtain in violation of the right of refusal, nor to use any information they receive for confiscation purposes. These laws are intended to protect the interests of family members (Section 101 Tax Code) and members of particular professions (Section 102 Tax Code) and to safeguard third parties from self-incrimination.

If a right to refuse information exists, there is no obligation to submit certificates and valuations to the tax authorities.

The law on the right of refusal to give information means that the tax authorities are not obliged to disclose information about the tax data they hold to the taxpayer. A right to inspect the files is also not provided under the Tax Code.

A Federal Finance Court decision has given the tax authorities a discretionary power to decide in each case whether the taxpayer involved should be allowed to inspect his file. This discretionary power is applied restrictively. Although a taxpayer can take legal action against a refusal to view the file, it has to be shown that the tax authorities have abused their discretionary power. Proving this is not easy. Therefore, only in exceptional cases will the taxpayer be able to inform himself about the information in the tax authority's files.

V. POSITION OF THE TAX ADVISER

The tax adviser's legal position depends on the legal rights of the profession as laid down by law in each of the Länder and in particular, on whether particular activities are reserved for the practise of the profession. These laws also cover professional membership and titles.

In Germany, the giving of formal advice in tax matters without restriction is regulated by the Tax Consultant Act, which specifies which professions may provide these services. The Act gives rise to the standards of quality expected in professional tax consultant services.

Tax advisers authorized under the Tax Consultant Act are also qualified to act as tax representatives in accordance with Section 22a of the VAT Law. The taxpayer can thus be represented by his (recognized) tax adviser in the tax courts. There is also a special provision permitting an authorized tax adviser to act as a tax representative for a company taxpayer with headquarters abroad.

There is a special quota rule in Germany for the submission of tax returns that are prepared by tax advisers. To give an example: the deadline for submitting income tax returns for 1997 is 30 September 1998. The quota rule states that the tax adviser has to submit 50% of the income tax returns he has prepared by 30 September 1998, 70% by 31 December 1998 and

the rest by 31 March 1999. It is also possible, in individually substantiated cases, to agree a later deadline with the tax authorities.

The division of labour between tax adviser and the client usually involves the adviser preparing the tax declaration, but some of the work involved having to be delegated to the client. This has become a politically delicate issue and is important for the future.

VI. CONCLUSION

This country report shows a rapid upgrading and modernization of IT and communications equipment in the tax offices in recent years to utilize the potential of the new technologies. These measures will gradually improve the efficiency and expediency of the tax administration and tax assessments, by creating shorter processing deadlines, reduced error rates and a more uniform assessment.

The vision of the future is the fully electronic tax return with a digital signature. The necessary infrastructure for this is already available and will undoubtedly improve in the coming years, moving further towards high capacity networks with higher transmission speeds and data volumes. The tax authorities have also been expanding their database systems to cover obtaining more information. There is a wide network of partners already providing information via EDT: they include the vehicle licensing authorities, the municipal administrations for the land tax, and, for data relating to trade taxes, the Chambers of Commerce and Industry. The Federal Ministry of Finance and increasingly, banks (in connection with the levy of taxes on interest and to compare taxpayers' applications for tax exemptions) are also among the tax authorities' partners in the use of EDT.

New types of data transfer are being developed for the creation and forwarding of control documents for the tax assessment. The use of control documents for assessments processed within the framework of tax treaties is increasing. Tax evasion investigators also transmit increasing volumes of accounting data from company PCs to the tax authorities' PCs for evaluation.

The other projects being developed are the abridged tax return and a tele-module for integration in tax declaration programs. The idea of introducing an "abridged tax return" arose in the tax authorities' discussions about extending the current transmission of tax declaration data to more of the Länder and to cover other types of taxes.

The process involves structuring an electronic tax return into logical blocks and only printing those parts, for which data has been provided (blocks or lines). This would save considerable amounts of paper at the tax offices. The first trial, for income tax, is to begin during 1999.

The introduction of the abridged tax return should be a significant step on the way to the "fully electronic tax return", for which paper will no longer be necessary. Many questions still remain to be answered, such as finding a practical form of digital signature.

The tele-module is being initially developed by the tax authorities for income tax. This will be capable of being integrated into the tax programs of different software companies, enabling the taxpayer himself to transmit the data for his tax return as electronic mail direct to the tax authorities. Assessment data can be sent through the same media. The Telebox is the mailbox and the data transmission should also be possible using the Internet.

Although it is envisaged that the taxpayer will be using his own access to the Internet to transmit this data, the tax authorities do not wish to transmit the assessment data back to the taxpayer directly. The assessments will be transmitted by electronic mail to a Telebox (mail-

box). From the tax consulting profession's point of view, it is debatable whether the taxpayer will be willing to submit data electronically if also required to pay for additional accessing of a Telebox in order to receive data back.

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1. "Verordnung über die Abgabe von Steueranmeldungen auf maschinell verwertbaren Datenträgern", (Decree on the Submission of Taxation Returns on Mechanically Utilizable Storage Devices).
 2. 22 August, 1980 Federal Statute 80 I 1617, in the wording of 24 March 1988, Federal Statute 88 I 443.
 3. Federal Gazette I 1411.
 4. The publicly developed and tested coding system is now generally considered to be so secure (provided the length of the necessary parameter key is carefully chosen) that the state security services and the criminal investigation services feel their activities threatened. The monitoring of coded correspondence has become practically impossible.