

# Recommendations on how to apply the GDPdU

Deutschsprachige SAP® Anwendergruppe (German-Speaking SAP User Group)

**DSAG WORK GROUP GDPDU**

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# *DSAG Special Interest Group Financials*

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RECOMMENDATIONS ON HOW TO APPLY THE GDPDU  
VERSION 3.0, AS OF 25TH AUGUST 2008

DSAG e.V.  
Deutschsprachige SAP-Anwendergruppe

RECOMMENDATIONS ON HOW TO APPLY THE PRINCIPLES OF DATA ACCESS  
AND AUDITING OF DIGITAL DOCUMENTS

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Work Group GDPdU of the SIG Financials

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# 1 Preamble

The DSAG Work Group GDPdU<sup>1</sup> in the Special Interest Group Financials was formed in September 2001 to develop solutions to implement legal regulations for data access in close cooperation with the Development Departments at SAP AG. After having published recommendations on this topic for the first time in May 2002 and the second version was published in May 2006<sup>2</sup>, the Work Group now presents the third version of the recommendations to apply the GDPdU. This time also, the work was the result of analyses from experts of member companies in the IT, Tax, Finance and Audit Departments of well-known companies. We have extended the report considerably compared with the second version. Comments have been made on the scope of SAP functions, which in the meantime have been distinctly enhanced, and explanations have been given for their practical application. Many suggestions from DSAG member companies and other SAP software application companies have been integrated. We also received information from the ranks of the fiscal authorities which were incorporated into the solution. The WG GDPdU has received practical experience from audits with digital access from several German Federal States.

The objective of our documentation is to offer advice "from members for members" as to how one can cope with the challenges of digital data access in practice. The WG GDPdU would once more like to sensitise all SAP users in general and their members in particular to the topic of data access. We hope that the information will assist all readers to control their individual company implementation in SAP systems and in any upstream and/or downstream systems. Even though a GDPdU implementation project was carried out perhaps a few years ago, new challenges for data access arise every day, so one should not consider this matter closed. The application of the GDPdU involves continuous updating if there are changes to organisation charts/business processes and IT systems. SAP offers a two-day workshop (Name of course: WDE680) directed at employees in the Accounting and Tax Departments as well as at system administrators, who are confronted with or who have to deal with data access by the fiscal authorities as part of tax audits.

Our recommendations are mainly based on experiences with the standard scope of functions of the SAP systems. The SAP industry solutions and expansion modules APO, SEM, CRM, SCM, BI, PLM, etc are generally not included in these recommendations. Many SAP systems have been modified in practice and have been upgraded with additional functions by third parties or with troubleshooting solutions which have been developed by the companies themselves. The consequences for the authorisation concept for the auditor's access and for the technical solution of the data media transfer arising from this are also not the purpose of our documentation. We have restricted ourselves to providing information on the options available in the SAP standard for DART so as to also incorporate company-specific changes in the database into the data media transfer.

These recommendations have been carefully investigated and developed by the WG GDPdU. Nevertheless, neither DSAG e.V. nor the members of the WG GDPdU, who participated in this development, will assume liability for the accuracy of the contents or for the acceptance of the recommendations or suggestions by the fiscal authorities. A liability is explicitly excluded. We would like to point out that these recommendations should not be seen as tax advice on an individual basis, but as providing food for thought and approaches to solving the problems. Any tax consultancy required has to be ensured by each company either internally or externally.



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1 Subsequently abbreviated as "WG GDPdU".  
2 Recommendations for applying the principles of data access and auditing of digital documents dated 31.05.2006, Version 2.0.  
[http://www.dsag.de/fileadmin/media/downloads/DSAG\\_GDPdU\\_Empfehlungen\\_V2\\_final\\_060531.pdf](http://www.dsag.de/fileadmin/media/downloads/DSAG_GDPdU_Empfehlungen_V2_final_060531.pdf)

# 1 Preamble

Please let us know if, in this context, you ever consider improvements necessary or can report on practical experiences during audits – both positive and negative ones. Contact address: see details on the spokesperson and the deputy of the WG GDPdU on the website [www.dsag.de](http://www.dsag.de)<sup>3</sup>.

We will revise the DSAG recommendations once more in due course, on the one hand to include the aspects not described in this version and on the other hand to take into account information and suggestions sent to us.

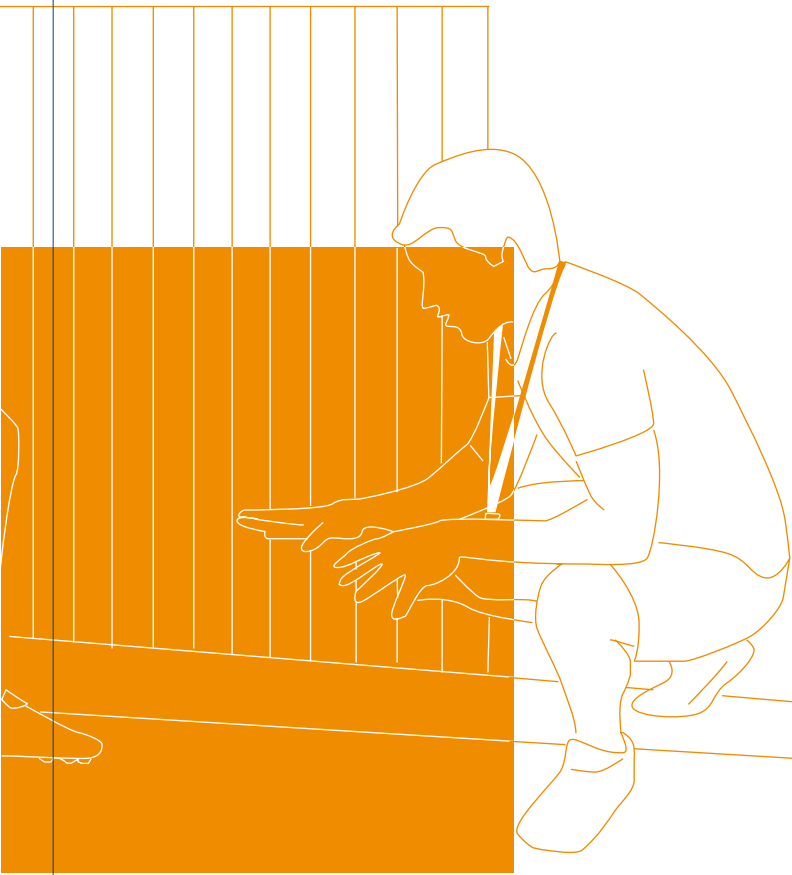
Rainer Böhle

Spokesman of the Work Group GDPdU of the SIG Financials



<sup>3</sup> [www.dsag.de/ag/gdpdu](http://www.dsag.de/ag/gdpdu)

See [www.dsag.de](http://www.dsag.de) → Special Interest Groups Overview → Processes → WG GDPdU.



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## 2 Introduction

Since 01.01.2002, the fiscal authorities have the right to access the taxpayers' computer systems within the scope of tax audits<sup>4</sup> in accordance with § 147 Section 6 AO<sup>5</sup>, in order to electronically check the accounting records of the taxpayer which have been created with the help of the data processing system. The powers of the fiscal authorities which have been drawn up very comprehensively with regard to data access and which have not always been defined precisely enough for data processing have been presented in a BMF (Federal Ministry of Finance) statement "Principles of Data Access and Auditing of Digital Documents (GDPdU)"<sup>6</sup>, which is binding for them.

The implementation of data access, which the auditor can choose optionally in the form

- > of direct access (Z1<sup>7</sup>)
- > of indirect access (Z2)
- > of data transfer on machine readable data medium (Z3)

is associated with a number of critical operational problems, which have to be solved in the company at a considerable effort.

The data access means that the taxpayer is obliged to provide the original, digitally-created and tax-relevant data with the corresponding hardware and software without delay, legibly and in a machine readable format.<sup>8</sup> At the same time, the 6 to 10 year record retention requirement in accordance with § 257 Sect. 1 HGB (German Commercial Code) and § 147 Sect. 1 and 3 AO taking into account the auditing acceptability generally still has to be complied with. It should present the taxpayers with great problems, above all in view of hardware and software changes in the company, to keep original, digitally-created tax-relevant data in a machine readable format and to make it legible at all times.

The data access right of the fiscal authorities has been specified more precisely by some judgements passed by the finance courts.<sup>9</sup> The BFH resolution dated 26.09.2007 is an example, in which the judge commented on the tax relevance of the complete financial accounting<sup>10</sup> and on the access to scanned original accounting receipts, which were originally in paper form.

Now after more than seven years of legally binding legislation, the fiscal authorities are actively using the data access. As far as we are aware, auditors are using the auditing software IDEA® more and more. We have registered that auditors normally request the digital provision of data for access types Z1, Z2 and/or Z3 from the companies. The course of action taken by the fiscal authorities is different from one Federal State to another. The fiscal authorities have recognised that the training to use the auditing software has to be accompanied by an intensive training of the auditors on SAP software and its functions.

Some Federal States have established or are establishing jobs for special computer auditors to support the auditors, while other Federal States are pursuing the objective that the auditors have to cope with data access themselves.

4 cf. § 193 ff. AO; for explanation see Sect. 3.2.3.

5 cf. Tax Reduction Act of 23.10.2000, Art. 7 and 8, BGBl.(Federal Law Gazette) I Pg. 1433.

6 BMF statement dated 16.07.2001, Ref.: IV D 2 – S 0316 136 / 01, BStBl I Pg. 415.

[http://www.bundesfinanzministerium.de/nr\\_58004/DE/BMF\\_Startseite/Aktuelles/BMF\\_Schreiben/Veroeffentlichungen\\_zu\\_Steuerarten/abgabenordnung/006.html](http://www.bundesfinanzministerium.de/nr_58004/DE/BMF_Startseite/Aktuelles/BMF_Schreiben/Veroeffentlichungen_zu_Steuerarten/abgabenordnung/006.html).

7 "Z" stands for type of access.

8 cf. § 147 Sect. 6 in conjunction with Sect. 2 No. 2 AO.

9 cf. Overview of the resolutions/judgements in Sect. 8.4.

10 cf. Sect. 4.3.



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## 3 Regulatory Framework

### 3.1 REGULATORY FRAMEWORK AND ADMINISTRATIVE CONCEPT

#### 3.1.1 TAX REDUCTION ACT OF 23.10.2000

The German Fiscal Code and the Sales/Purchases Tax Law have been changed as from 01.01.2002 due to the Tax Reduction Act of 23.10.2000<sup>11</sup>. The following table shows the changes in the law in keywords:

LEGAL FOUNDATION	KEYWORD
§ 146 Sect. 5 Cl. 2 and 3 AO	To be able to have the data at one's disposal at any time within the retention period and to make it legible without delay
§ 147 Sect. 2 No. 2 AO	To be able to have the data at one's disposal at any time within the retention period, to make it legible without delay and to be able to evaluate it automatically.
§ 147 Sect. 5 AO	To provide aids to make the documents legible on image carriers.
§ 147 Sect. 6 AO	Data Access Law
§ 200 Sect. 1 Cl. 2 AO	The obligation to cooperate during the auditor's data access in accordance with § 147 Sect. 6 AO.
§ 14 Sect. 4 UStG	Electronic invoicing with a digital signature in accordance with the Signature Law of 22nd July 1997 (BGBl. I, Pg. 1870, 1872) is recognised as an invoice.

Table 1: Overview of the changes in law due to the Tax Reduction Act 2000

As a reason for the changes in the AO, the fiscal authorities state the increased electronic trading, the intense use of computers in the companies and the introduction of the qualified electronic signature in the companies (permitted for sales/purchase tax in acc. with § 41 Sect. 4 Cl 2 UStG). Above all with regard to the last point, the fiscal authorities claim that they have to check electronically created invoices in the same manner, i. e. electronically.

From the changes in § 147 Sect. 2 No. 2 and Sect. 6 AO, the taxpayer is obliged to provide digitally-created tax-related data or documents immediately, which are legible and automatically processable at all times, and the auditor has the right to inspect this stored data during an audit or to get the data on machine-readable data media (data media transfer).

---

11 Lc.

### 3.1.2 BMF STATEMENT DATED 16.07.2001

The Federal Ministry of Finance (BMF) published the "Principles of Data Access and Auditing of Digital Documents (GDPdU)" in its statement dated 16.07.2001<sup>12</sup>. The powers, which the fiscal authorities have been granted through the change in the AO, above all in §147 Section 6 AO, have been substantiated in it.

The data access of the auditor during a tax audit is explained in more detail from the point of view of the fiscal authorities in the BMF statement dated 16.07.2001<sup>13</sup>. The auditor can access all the original digitally-created tax-related data of a company. To do this, he/she has the three types of access (Z1, Z2 or Z3)<sup>14</sup> at his/her disposal. S/he can also use several of the options cumulatively.

At the same time however, s/he also has to take the principle of proportionality into account. This means, s/he may not demand anything impossible and has to choose the manner and scope of access such that the taxpayer is the least burdened.<sup>15</sup>

It has to be pointed out in this connection that during an audit, the fiscal authorities can still demand that the tax-related data is presented to them as up to now e.g. in paper form or in the respective form of storage. This option can be chosen solely at the discretion of the auditor. It can be assumed that in the near future this alternative will be used less and less. Each taxpayer has to decide for himself/herself how to handle the data access, whether s/he contacts the tax authorities or his/her tax consultant at an early stage to avoid misunderstandings in the procedure to carry out the audit and to discuss it, if possible, with the auditor himself/herself.

The BMF statement dated 16.07.2001 represents an implementation or interpretation of the legal regulation for data access which is solely binding for the fiscal authorities. To what extent the interpretation of the legal norms by the fiscal authorities and the measures on which they are based can be met and are conforming to the law, can only be decided bindingly by the system of the finance courts<sup>16</sup>. Each company has to decide for itself whether it is prepared to comply with the principles demanded by the fiscal authorities or whether it seeks final clarification through the finance courts.

Furthermore, this document will comment on the digital verifiability of electronic billings (qualified electronic signature) in terms of §14 Sect. 4 Cl 2 UStG. The electronic signature is an additional element in favour of an unlimited input tax deduction for incoming invoices. This new form of transmission and control of invoices, whose auditing acceptability should be ensured by the qualified signature, was not the purpose of our deliberations within the WG GDPdU.

12 L.c.

13 L.c.

14 cf. Sect. 3.2.4 ff.

15 cf. §5 AO, BMF statement dated 16.07.2001, Sect. III 3, L.c.

16 Some court judgements have specified the right to access more precisely, c.f. Sect. 8.4.



## 3 Regulatory Framework

### 3.1.3 BMF FREQUENTLY ASKED QUESTIONS (FAQ) AND ZVEI COMMENTS

The fiscal authorities have published frequently asked questions (BMF FAQ) on the internet dealing with questions associated with the right to data access.<sup>17</sup> The current version is dated 23.01.2008, previously versions dated 15.01.2007, 01.02.2005, 06.03.2003 and 22.08.2002 were available on the internet.<sup>18</sup>

It should provide a guideline for the practical implementation of the right to data access from the point of view of the fiscal authorities. We have to point out the legally non-binding nature of the BMF FAQ. It is solely a "guideline". As stated by the BMF in a statement dated 24.06.2003 to ZVEI Zentralverband Elektrotechnik- und Elektronikindustrie e. V., Frankfurt, the catalogue of questions does not have the legal quality of an administrative directive. It is up to both the fiscal authorities as well as the economy to comply with it. In the meantime, several court judgments have made reference to the BMF FAQ, its legal quality rating however has in spite of this not improved.

In cooperation with its members, ZVEI has published on its internet homepage a comment on the version of the BMF FAQ dated 15.01.2007 from the point of view of the companies.<sup>19</sup> ZVEI views this as an argumentation aid for companies. The important conclusions of the comment can also be applied to the current status of the BMF FAQ dated 23.01.2008.

In the BMF statement dated 16.07.2001 it mentions furthermore that the remaining provisions of the GoBS<sup>20</sup> remain unaffected. At the same time however it has to be taken into consideration that the GDPdU, which are seen as an enhancement to the GoBS by the BMF, partly contradict it. In case of doubt, the GDPdU have priority over the GoBS, this is the opinion of the fiscal authorities (cf. BMF-FAQ, Sect. III, Answer to Question 5 and 7)<sup>21</sup>. This is the opinion also in the comments on §146 AO<sup>22</sup>, while ZVEI has a different opinion.<sup>23</sup>

### 3.1.4 FURTHER DEVELOPMENT OF GDPDU

The BMF is of the opinion that they only want to deal with and examine the substantial change requests regarding the right to data access both by the fiscal authorities and also by companies or trade associations in due course, in particular only once they have acquired a representative amount of practical experience. With regard to the state of the preparations for this recommendation (Editorial deadline: 11.08.2008) we were not aware of any official initiative to change the GDPdU, apart from the initiative to reduce bureaucracy<sup>24</sup>, see the annual report of the AWW Arbeitsgemeinschaft für wirtschaftliche Verwaltung e. V., Eschborn, to the Bundeswirtschaftsministerium für Wirtschaft und Technologie (Federal Ministry of Economics for the Economy and Technology)<sup>25</sup>. It remains to be seen to what extent the discussions on the new tax compliance models within the fiscal authorities (Keyword: annual government tax audit) will develop. Here there would be the opportunity for the fiscal authorities to give companies the desired relief in terms of the GDPdU with clear definitions and stipulations.

The WG GDPdU will continue the dialogue with the fiscal authorities, which commenced years ago, to clarify doubtful matters within the scope of SAP applications.<sup>26</sup>

17 BMF FAQ, current status: 23.01.2008, Source:

[www.bundesfinanzministerium.de/Wirtschaft\\_und\\_Verwaltung → Steuern → Veröffentlichungen zu Steuerarten → Betriebsprüfung → Datenzugriff \(GDPdU\).](http://www.bundesfinanzministerium.de/Wirtschaft_und_Verwaltung_-_Steuern_-_Veroeffentlichungen_zu_Steuertypen_-_Betriebspruefung_-_Datenzugriff_(GDPdU)._(Economy_and_Administration_Taxes_Publications_on_Tax_Types_Audits_Data_Access_(GDPdU))) (Economy and Administration, Taxes, Publications on Tax Types, Audits, Data Access (GDPdU))

[http://www.bundesfinanzministerium.de/nn\\_308/DE/BMF\\_Startseite/Service/Downloads/Abt\\_IV/09\\_templateId=raw\\_property=publicationFile.pdf](http://www.bundesfinanzministerium.de/nn_308/DE/BMF_Startseite/Service/Downloads/Abt_IV/09_templateId=raw_property=publicationFile.pdf)

18 All versions of the BMF FAQ are available under: <http://www.elektronische-steuerpruefung.de/faqs/faqsbmf.htm>

19 [www.zvei.de](http://www.zvei.de), Search term "GDPdU".

20 BMF statement dated 07.11.1995 GoBS - Generally accepted principles of computer-assisted accounting systems, Ref.: IV A 8 - S 0316 - 52/95, BStBl. I, Pg. 738.

21 I.c.

22 cf. Tipke/Kruse, Commentary on the AO and FGO, Comments on §§146, 147 AO.

23 ZVEI Comment, Chapter III, to Question 7. I.c.

24 cf. KMU Project (Small and medium-sized companies project) of the AWW commissioned by the BMWA to optimise the record retention requirements, [http://www.awv-net.de/cms/front\\_content.php?idcat=17&idart=173](http://www.awv-net.de/cms/front_content.php?idcat=17&idart=173)

25 Source: [http://www.elektronische-steuerpruefung.de/faqs/buerokratieabbau\\_aufbewahrungspflichten.pdf](http://www.elektronische-steuerpruefung.de/faqs/buerokratieabbau_aufbewahrungspflichten.pdf)

26 cf. status of the discussions with the fiscal authorities: <http://www.dsag.de/index.php?id=79&dsag%5Bakag%5D=103&cHash=96caeedb6f15>

## 3.2 ACCESS TO TAX-RELEVANT DATA

### 3.2.1 THE TERM “TAX-RELEVANT DATA”

The term “tax-related data” has not been defined nor specified respectively within the scope of the legal provisions for data access. The statutory record retention requirements and the data access refer to the documents mentioned in § 147 Sect. 1 AO:

- > Accounts and records, inventories, financial statements, management reports, the opening balance sheet as well as the instructions required for their comprehension and other organisational documents
- > The received commercial or business letters
- > Reproduction of the sent commercial or business letters
- > Accounting records
- > Documents, which have to be attached to a customs declaration, which has been submitted with data processing media in accordance with Art. 77 Sect. 1 in connection with Art. 62 Sect. 2 Customs Code, provided that the customs authorities in accordance with Art. 77 Sect. 2 Cl. 1 Customs Code have dispensed with the submission of originals or has returned the originals after submission
- > Other documents if they are significant for taxation.

In accordance with § 147 Sect. 1 No. 5 AO other documents have to be stored, if they are of significance for taxation. This applies also to original digitally-created data. In the BMF statement dated 16.07.2001<sup>27</sup> the fiscal authorities are of the opinion that the data for financial accounting, asset accounting as well as payroll accounting comes under this regulation and is thus completely tax-relevant. The BFH has confirmed this in its resolution dated 26.09.2007<sup>28</sup> concerning the data for financial accounting. The taxpayer did not want to allow access to the accounts for provisions set up for impending losses, for commercial tax assessments and for non-deductible operating expenses. The BFH rejected this with the justification that the financial accounting accounts are “accounts” in terms of § 147 Sect. 1 Cl. 1 No. 1 AO and that commercial accounting as a whole is suitable for determining the examination of the tax basis. For this reason, accounting as a whole is of significance for taxation in accordance with § 140 AO<sup>29</sup>. According to the BFH, tax relevance may not be set on an equal footing with “effect on tax”.

If there is original digitally-created tax-relevant data in other areas of the data processing systems, then in the opinion of the fiscal authorities the taxpayer has to qualify it in accordance with the recording and retention requirements and to make it available in a suitable manner for data access. From the point of view of the fiscal authorities, the taxpayers have the obligation to check in detail their procedure environment for tax relevance of the data. This is basically also affirmed in the final judgment of the Finance Court Rhineland-Palatinate dated 13.06.2006<sup>30</sup>. According to this, data from cost centres are tax relevant if they refer to the evaluation of e.g. participations, assets or provisions. In addition, the Finance Court has specified high requirements for further access to other cost centres, in which the auditors assume tax-relevant data. If the data required by the auditors should not only be found in the cost centre accounting, but – as in the case under judgement – also be completely contained in the financial accounting, then according to the judge, the auditor has to use the options available to him/her to check the financial accounting within the scope of the access types Z1 and Z3.

<sup>27</sup> Section 11, Para. 2, L.c.

<sup>28</sup> BFH Resolution dated 26.09.2007, I B 53 54 / 07, BFH / NV 2008, Page 133.

<sup>29</sup> cf. Sect. 4.3.

<sup>30</sup> Financial Court Rhineland-Palatinate, Judgement of 13.06.2006, Ref. 1-K-1743 / 05, legally binding, EFG 2006, Page 1634.



### 3 Regulatory Framework

Only then may they specifically access additional data of the cost centre accounting (Keyword Implementation of the auditor's inquiry).<sup>31</sup>

The BMF decree dated 28.11.2007<sup>32</sup> expands the requirements to include documents for customs purposes.

#### 3.2.2 VALIDITY OF THE DATA ACCESS AND SCOPE OF APPLICATION

The German fiscal authorities basically have the right to access the taxpayers' data electronically for audits starting after 31.12.2001. This right also includes the access to data of previous financial years within the scope of the record retention requirements according to § 147 AO, if the data was still located on the production system at the time of the audits. I.e. the auditor has to be given access to data which a company has archived and reorganised after 31.12.2001 for financial years before 2002.<sup>33</sup>

On the other hand, in the case of archiving carried out before 01.01.2002, the data does not have to be reloaded into the production system, if this means an unreasonably high expense for the company.<sup>34</sup> However in this case it has to be pointed out that for the terms "Archiving", "Reloading" and "Reorganisation" used by the fiscal authorities there is no common understanding even in the IT world.<sup>35</sup>

The new regulations on data access in accordance with §§ 146, 147 and 200 AO only have to be taken into consideration for domestic companies and the business premises of foreign companies covered by the German Fiscal Code. The accounting data has to remain within the scope of the Fiscal Code (Germany).<sup>36</sup> In our opinion, this legal regulation no longer corresponds to the current business requirements on companies, which have introduced business/corporate processes crossing the frontiers of different countries as part of globalisation, e.g. Shared Service Center. To implement the EU invoice guidelines into the German Sales/Purchases Tax Law (UstG), the BMF in its statement dated 29.01.2004<sup>37</sup> has indeed allowed the storage of electronic invoices with digitally qualified signature in the EU, if an electronic access by the fiscal authorities on this data, which is located in the EU, can be ensured.<sup>38</sup> However this applies only to the sales/purchase tax. With regard to income tax, the data still has to be stored in Germany.<sup>39</sup>

Data access by the fiscal authorities also applies in various forms in other countries (e.g. Austria, France, Switzerland, Portugal and USA). No comment is made in these recommendations on the regulations in other countries.

31 cf. BMF FAQ, Sect. I, Question 7, I.c., and ZVEI comment I.c.

32 BMF decree dated 28.11.2007, Principles of data access and auditing of digital documents for the area of responsibility of the customs authorities (GDPdJUZ), Ref.: III A 3 – S 1445 / 06 / 0029, <http://www.elektronische-steuerpruefung.de/rechtsgrund/gdpdruz.pdf>.

33 BMF statement dated 16.07.2001, Section 3 b, I.c.

34 BMF statement dated 16.07.2001, Section 3 a, I.c.

35 cf. also Sect. 4.5.1.

36 cf. §146 Sect. 2 Cl. 1 AO as well as identical OFD (Regional Tax Office) decree Munich / Nuremberg dated 23.12.2002, Ref. Munich: S-0315 – 17 St 312, Ref. Nuremberg: S-0315 – 8 St 24.

37 BMF statement dated 29.01.2004, Implementation of the Directive 2001 / 115 / EC (Directive on Invoicing) and the jurisdiction of the European Court of Justice and the Supreme Tax Court (BFH) on the incorrect and unauthorised tax statement by the second law to change tax regulations, Ref. IV B 7 – S 7280 – 19 / 04, [http://www.bundesfinanzministerium.de/nn\\_58004/DE/BMF\\_Startseite/Aktuelles/BMF\\_Schreiben/Veroeffentlichungen\\_zu\\_Steuerarten/umsatzsteuer/024.html](http://www.bundesfinanzministerium.de/nn_58004/DE/BMF_Startseite/Aktuelles/BMF_Schreiben/Veroeffentlichungen_zu_Steuerarten/umsatzsteuer/024.html).

38 Lit. 74, I.c.

39 Lit. 77, I.c.

### 3.2.3 FIELD AUDITS IN TERMS OF § 147 AO

Audits, for which the regulations of the GDPdU apply, are primarily based on the following tax areas:

#### > GENERAL GOVERNMENT TAX AUDIT (OR INCOME TAX AUDIT)

It includes the tax types: corporate income tax, personal income tax, capital gains tax, trade tax, solidarity surcharge and sales/purchases tax. The focus is on the balance sheet and income statement, statements for individual P&L items, general ledger accounts, sub-ledger accounts of accounts receivables and accounts payables, asset accounting data, securities (portfolio overviews, portfolio growth overview, acquisition/retirement lists, portfolio cash flows), inventory write-offs and depreciations for insurance accounting.

The fiscal authorities also expect a better control of the internal transfer prices with the help of the electronic data access. On the one hand, the BMF<sup>40</sup> assumes that § 147 Sect. 6 AO is applicable as part of the tightening of the transfer price documentation. On the other hand, the records on profit splitting in terms of § 90 Sect. 3 AO are a documentation of the suitability, while § 147 Sect. 6 AO refers to the documentation of the facts. The relationship of these two provisions to one another is still not clear.

#### > GOVERNMENT TAX AUDIT ON INSURANCE TAX/FIRE PROTECTION TAX

The subject matter of this audit is amongst others the balance sheet/P&L statement, general ledger accounts, accounting journals (in particular with ref. to the contribution income) as well as statements for individual balance sheet and P&L items, which e.g. could be based on individual computer analyses.

#### > AUDIT ON EMPLOYMENT TAX

This refers to payroll accounts, salary statements and travel expense accounting, balance sheet and P&L statement, general ledger accounts etc. as well as statements for individual P&L items such as corporate events, entertainment expenses, voluntary fringe benefits and gifts.

#### > SPECIAL AUDIT ON SALES/PURCHASES TAX

It includes, above all, the examination of all sales, sales/purchase tax and input tax accounts as well as other operating income accounts, if they are of significance to the validation of the turnover tax.

#### > CUSTOMS AUDIT

In accordance with the announcement of the BMF decree dated 28.11.2007<sup>41</sup> in terms of § 193 AO, § 33 Law to implement the Common Market Organisation and § 12 Market Regulation Act, it primarily includes customs audits for import duties for procurements from third countries, customs monitoring, market regulation audits or audits in accordance with § 44 Law on Foreign Trade and Payments.

#### > ADDITIONAL AUDITS

The digital data access also applies to audits connected with excise duty (electricity tax, petroleum tax, tax on beer, tax on spirits etc). The sales/purchases tax inspection (§ 27 b UStG) is not an audit in terms of § 193 AO. It does not fall under the scope of application of the GDPdU. In accordance with § 27 b Section 3 UStG, it can however turn into an audit.

<sup>40</sup> cf. BMF statement dated 12.04.2005, Principles on the auditing of income allocation between affiliated persons with cross border business relations regarding the obligation to investigate and cooperate, adjustments as well as the mutual agreement procedure and EU arbitration procedure (Administrative Principles Procedure), Ref.: IV B 4 – S 1341 – 1 / 05, Tz. 3.4.3, [http://www.bundesfinanzministerium.de/nrnn\\_58004/DE/BMF\\_Startseite/Aktuelles/BMF\\_Schreiben/Veroeffentlichungen\\_zu\\_Steuerarten/internationales\\_steuerverrecht/001.html#28](http://www.bundesfinanzministerium.de/nrnn_58004/DE/BMF_Startseite/Aktuelles/BMF_Schreiben/Veroeffentlichungen_zu_Steuerarten/internationales_steuerverrecht/001.html#28)  
BFH Resolution dated 26.09.2007, I B 53 54 / 07, BFH / NV 2008, Page 133.

<sup>41</sup> L.c.



## 3 Regulatory Framework

### 3.2.4 DIRECT ACCESS (Z1 ACCESS)

The auditor has the right to access independently the taxpayer's computer systems which contain tax-relevant data, by using a user role that has been set up for him/her. The taxpayer has to provide the hardware and software, so that the auditor can inspect the data and evaluate it automatically. The direct data access includes the Read-Only access including a sorting and filtering function on the taxpayer's computer systems by the auditor to examine

- > transaction data (e.g. accounting records in the financial accounting)
- > master data (e.g. vendor master) and
- > links (for example between the tables of a relational database, e.g. between document header and document line of the financial accounting document).

The evaluation options available in the system are subject to the right of access. Only the evaluation programs and evaluation types actually used by the company in the computer system can be meant when speaking of "existing evaluation options". These include also customer developments of the company to evaluate tax data, which has to be made accessible to the auditor. Amongst others, custom-developed evaluations have to be pointed out, in whose programme code is specified that they are only executable for one specific company code. In the BMF FAQ, Section II, Question 1 in conjunction with Section III, Question 13, the term "available evaluation options" is interpreted very broadly.<sup>42</sup> According to this the taxpayer should also provide standardised evaluation programs, which are not installed on the computer system, but which are included in the scope of functions of the software. Taking the principle of proportionality of the means into account, the taxpayer can certainly not be expected to have to install or activate evaluation options, which are neither used by himself/herself nor approved for productive use, just for audit purposes. When checking the principle of proportionality, the technical realisation and the required personnel effort have to be taken into account.

In addition, the fiscal authorities interpret the term "existing evaluation options" to the effect that they also include application programs which are indeed available in the company but which are not used by the taxpayer himself/herself. In the BMF FAQ the term "standard software" is used and the "spreadsheet programme" is named as an example.<sup>43</sup> ZVEI has applied its comments on the BMF FAQ in this respect to the system landscape which the taxpayers actually use.<sup>44</sup>

The fiscal authorities interpreted the "use of available evaluation options" very broadly even before the resolution of the BFH dated 26.09.2007<sup>45</sup>. If postings have a link to a document in electronic form, then in their opinion the right to data access includes the release of this linked document.

The BFH has not dealt with the question whether the right to inspect such linked documents in electronic form arises from the GDPdU (although the Finance Courts<sup>46</sup> tried to justify this extensively). The BFH has already derived the obligation to present the data in electronic form from §145 Sect. 5 AO, which regulates the making legible of documents to be stored and to be presented (e.g. commercial letters, invoices, etc.) The auditor thus does not have to be content with a print output, but can demand the taxpayer to provide him/her with the equipment to display the data electronically. The BFH, however, has not specified any specific manner.

42 I.c.; cf. also ZVEI comment, Sect. I, Question 2 in conjunction with III., Question 12 (BMF FAQ 15.01.2007), c.l.

43 Section III, Question 12, c.l.

44 cf. ZVEI comment, Section III, Question 12 (BMF FAQ 15.01.2007), c.l.; for the auditors workplace see also Section 4.6.1.

45 I.c.

46 cf. Finance Court Düsseldorf, Resolution dated 05.02.2007, 14 V 3454 / 06, not legally binding, EFG 2007, Page 892.

The following practical implications arise from this:

- > If the auditor demands that such documents be presented “electronically”, then the taxpayer has to extend the auditor’s access to include this authorisation.
- > However any other form of “electronic” presentation (e.g. as an electronic document on specific demand or by setting up another read authorisation on archived documents) is conceivable.

According to the BFH Resolution dated 26.09.2007, companies are obliged to check these access options and also to set them up upon demand.

A remote inquiry by the fiscal authorities to the taxpayer (online access) is excluded according to the BMF statement dated 16.07.2001<sup>47</sup>.

### 3.2.5 INDIRECT ACCESS (Z2 ACCESS)

In the case of this type of access, the auditor does not evaluate the data himself/herself unlike for Z1, but demands that the taxpayer or an authorised third persons evaluates the data according to his/her specifications automatically with a read-only access. The taxpayers are obliged to support the auditors,<sup>48</sup> by providing persons who are familiar with the computer system (see also details on direct access Z1<sup>49</sup>).

### 3.2.6 DATA TRANSFER (Z3 ACCESS)

In addition, the auditor has the right to demand the taxpayer to transfer the tax-relevant data on data media for automatic evaluation. This also applies if the data is located outside the taxpayer’s premises at a company authorised to do the accounting (e.g. tax consultant) or on a system of an operator of an electronic data processing centre.

The fiscal authorities uses the auditing software IDEA<sup>®</sup> with the interface SmartX for this form of data access at national level and in fact solely on the systems of the fiscal authorities/the computers of the auditors. If, as a result of the analysis of the data transferred to the data media, there are for example indications which seem to suggest that an intensive check is required or if the data provided on the data medium is not adequate for tax assessment, then the auditor is authorised to use the additional direct and indirect data access (Z1/Z2). S/he can however also demand new data media with additional tax-relevant data which has previously not been provided.

The auditor has to return the transferred data media at the latest after completion of the audit and once the notifications issued as a result of the audit start to be legally valid. Data on the auditor’s computers will be deleted.<sup>50</sup> The return of the data medium should be monitored, in particular if there have been many requests for data media transfer within the scope of the audit.<sup>51</sup>

47 cf. Sect. 1 I a. I.c.

48 cf. Obligation to cooperate in acc. with §200 Sect. 1 Cl. 2 in conjunction with §147 Sect. 5 and Sect. 6 Cl. 3 AO.

49 cf. Section 5.4 Technical Z1/Z2 Access.

50 BMF statement dated 16.07.2001, Section 1 I c. I.c.; BMF FAQ, Section II, Question 5, I.c.

51 cf. Sect. 4.6.2.



## 3 Regulatory Framework

### 3.2.7 DATA SPECIFICATION STANDARD

The law does not specify any binding statements on data medium and the data formats. Even the BMF statement dated 16.07.2001<sup>52</sup> does not say anything about it. The BMF FAQ<sup>53</sup> names some data formats, including “SAP/AIS”. The SAP Audit Format is meant.

As part of the data media transfer, the auditors have to be provided with the information required for processing such as e.g. format specifications, file structure, data field definitions as well as internal and external links, the so-called data record description.<sup>54</sup> The SAP Audit Format meets these requirements. The link information is an integral part of a DART extract and can be made available to the auditor. The SAP Audit Format can be interpreted by auditing software such as IDEA® or ACL<sup>55</sup>. The BMF promotes the specially developed XML format for the data record description as part of the automation of the IDEA® interface.<sup>56</sup>

The proprietary XML format for the data record description is not obligatory for taxpayers. All data formats named in the BMF FAQ serve the purpose. It has to be pointed out however that the data file cannot be read by the auditing software IDEA even in XML format. This format is also not named as data format in the BMF FAQ.

### 3.2.8 CUMULATIVE ACCESS

At the auditor’s discretion, s/he can make use of the access types Z1 to Z3 in parallel, one after the other or optionally.<sup>57</sup>

### 3.2.9 MACHINE READABILITY

The law does not regulate what is to be understood by the term “Machine Readability”. The BMF statement dated 16.07.2001<sup>58</sup> remarks that the read-only access includes the reading, filtering and sorting of tax-relevant data using the evaluation options available in the data processing system, whereby in our opinion by “existing evaluation options” they means only those that are actually used by the taxpayer.<sup>59</sup>

For example, a balance audit trail exclusively on microfilm or in another non-readable format (e.g. PDF or TIFF) or archiving of lists in paper form or on COM film no longer meet the requirements of the GDPdU, as no sorting and filtering of data records are possible on this material.

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52 I.c.

53 Section II, Questions 2. & 3., I.c.

54 BMF statement dated 16.07.2001, Section 1 2 C, I.c., BMF information on description standard dated 15.08.2002, Ref.: IV D 2,

[http://www.bundesfinanzministerium.de/nrnn\\_53848/DE/BMF\\_Startseite/Service/Downloads/Abt\\_IV/010\\_property=publicationFile.pdf](http://www.bundesfinanzministerium.de/nrnn_53848/DE/BMF_Startseite/Service/Downloads/Abt_IV/010_property=publicationFile.pdf).

55 IDEA® used by the German Fiscal Authorities, ACL® e.g. used by the Austrian Fiscal Authorities.

56 ACL® cannot read this format.

57 BMF statement dated 16.07.2001, Section 1, Para. 5, I.c.

58 cf. Sect. I 1 a, I.c.

59 cf. Section 3.2.4.

If original digitally-created tax-relevant data in terms of §§ 146 and 147 Sect. 1 AO is stored on machine-readable data media, then attention has to be paid that the applied procedure to create the data media and for its storage corresponds to the GOB<sup>60</sup>/GoBS<sup>61</sup>. It has to be ensured that availability, legibility and machine readability is guaranteed at all times during the retention period.

To guarantee this machine readability within the scope of the data medium exchange, the taxpayer has to provide a data record description in a readable format, as shown in Section 3.2.7, so that the audit programme IDEA<sup>®</sup>, which the auditor uses on his/her own computer, can evaluate the information automatically when importing the data by means of the significance of the fields.

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60 Generally Accepted Accounting Principles (GAAP): cf. for term and additional supporting documents: Küting/Weber, Handbuch zur Rechnungslegung, Kommentar zur Bilanzierung und Prüfung, (Guide to accounting, comments on accounting and auditing) 4., fundamentally revised and greatly extended edition, Stuttgart 1995, Band 1a, I, Chapter, Page 135 ff., Tz. 238 ff.

61 BMF statement dated 07.11.95, I.c.



## 4 Challenges in Implementing the GDPdU

### 4.1 INTERDISCIPLINARY WORK GROUP

The implementation and customization of organisational measures as a result of the statutory provisions of the GDPdU is an interdisciplinary subject and cannot therefore be processed by IT, Finance, Accounting or Taxation alone. From the point of view of the WG GDPdU, at least the following specialist areas/departments in the companies or external service providers have to work together to implement the requirements of the GDPdU:

- > Tax Department
- > IT
- > Finance and Accounting
- > Internal Auditing
- > Data Protection Officer

### 4.2 VAGUE LEGAL CONCEPTS

The implementation of the legal provisions for the digital access is considerably hindered by the vague legal concepts used in the legal text<sup>62</sup>, in the BMF statement dated 16.07.2001<sup>63</sup> and in the BMF FAQ<sup>64</sup>, such as e.g.

- > tax-relevant data
- > machine readability
- > optional access
- > use of existing evaluation options
- > automatic archive
- > data links (internal and externals)

and results therefore in legal uncertainty when implemented. In some points, this legal uncertainty has been reduced or put into perspective due to the increasing number of audits using access types Z1 to Z3 as a result of experience gained in practice by the auditor and the taxpayer as well as due to the relevant case laws<sup>65</sup>. Nevertheless there will not be an “airtight” solution for all doubtful cases. There is still a certain legal uncertainty and it will continue.

#### PRACTICAL TIP:

Document promptly and comprehensibly why you have chosen a specific approach for the practical implementation of the GDPdU.<sup>66</sup>

This means that if questions are asked by the auditors, which could possibly be asked years after your decision, you will then still have the corresponding reasons and supporting documents

62 cf. Tax Reduction Act of 23.10.2000, I.c.

63 I.c.

64 I.c.

65 cf. Sect. 8.4 Keyword “Finance court jurisdiction”.

66 cf. ZVEI comment, Section I, Question 6, I.c.

### 4.3 IDENTIFICATION OF TAX-RELEVANT SYSTEMS AND DATA

Neither in the law nor in the administrative announcements is it conclusively specified which original digitally-created data is tax-relevant. Only the data from the

- > financial accounting (ledger entry and current accounts)
- > payroll accounting
- > asset accounting

is clearly indicated as tax-relevant in the BMF statement dated 6.07.2001<sup>67</sup>. In practice there is also doubt here about the tax-relevance of all data in these forms of accounting (e.g. data from parallel accounting under US-GAAP and IFRS).

If there is also tax-relevant data in other areas of the data processing systems, then it has to be qualified by the taxpayers.<sup>68</sup> It has to be pointed out that only the data which is of significance to taxation has to be regarded as tax-relevant data.<sup>69</sup>

According to the prevailing opinion, these include the classic cross-sector SAP standard applications from

- > purchasing, inventory management, order processing
- > processing of invoices and credit notes
- > customs and foreign trade processing
- > cost accounting and results accounts,

which have to be checked for tax relevance. This data is found primarily in the SAP core applications MM, SD and CO. Depending on the company or industry, there can be considerable differences. Upstream or downstream procedures and systems have basically to be incorporated in the examination.

It is the responsibility of the company on the one hand to define the scope of its tax-relevant data, and on the other hand based on this to ensure that the auditor can only access the original digitally-created tax-relevant data. The company thus has the responsibility as the taxpayer to separate the original tax-relevant data from the non tax-relevant data, if it has been originally created digitally in the data processing system.<sup>70</sup> In this connection it has to know behind which field or which table the tax-relevant data is hidden. This is the actual challenge in identifying the tax-relevant data or in implementing the GDPdU requirements in the relevant procedures and systems. For the SAP data model there is the list of data prepared by the WG GDPdU for DART<sup>71</sup>, which provides an indication to identify tax-relevant data.

Alongside an accounting system managed by SAP, there can be additional tax-relevant data in many application areas in the company, as the following diagram shows:

<sup>67</sup> Section 1 I, Para. 2, I.c.

<sup>68</sup> BMF statement 16.07.2001, Section. I 1, Para. 3, I.c.

<sup>69</sup> Vgl. §147 Abs. 1 Nr. 5 AO, ZVEI-Kommentierung, Abschnitt I, Frage 6, a.a.O.

<sup>70</sup> cf. §147 Sect. 1 No. 5 AO, ZVEI comment, Section I, Question 6, I.c.

<sup>71</sup> cf. For the scope of the data catalogue: SAP Notes 582583 with stored EXCEL tables with the segment and field catalogues for each DART release.



## 4 Challenges in Implementing the GDPdU

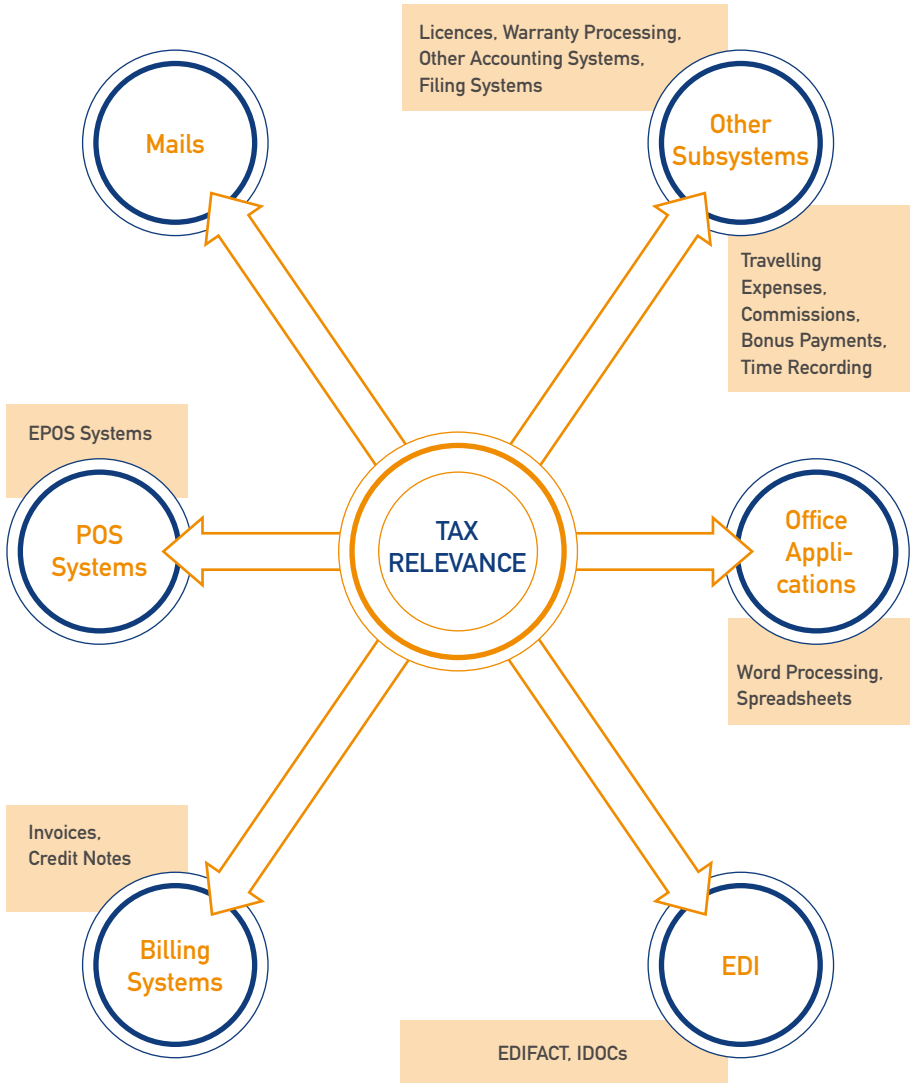


Figure 1: Diagram of the system landscape of a company

### 4.3.1 PROCEDURE TO IDENTIFY SYSTEMS

Several options are available for identifying tax-relevant data in the taxpayer's computer systems:

- > Retrograde auditing method
- > Progressive auditing method
- > Qualification by means of commercial letter definition
- > Qualification by means of the documents presented to the auditor in the previous auditing periods

#### RETROGRADE AUDITING METHODS

According to GoBS<sup>72</sup>, retrograde auditing starts with the balance sheet or profit and loss statement or self-assessment/tax return, it continues with the accounts and ends with the receipt. In practice, this means that the technical interface of upstream processes to financial, asset and payroll accounting, which is defined in the BMF statement dated 16.07.2001<sup>73</sup> as tax relevant, could be an indication of tax-relevance data in this upstream process. The same applies if the financial accounting module in an ERP system provides a direct connection to the other modules in this system such as e.g. in the SAP R/3: Drill Down function based on the FI document for invoice documents in the MM module or to costing documents in the CO module.

#### PROGRESSIVE AUDITING METHODS

The progressive auditing applies to a direct auditing fact and looks for its traces in the computer systems. If e.g. the purchase of an asset based on a contract leads to changes in capitalised assets or inventories, possibly also associated with effects on a merchandise information system.

#### QUALIFICATION BY MEANS OF COMMERCIAL LETTER DEFINITION

Based on the definition of the term "commercial letter" and its mandatory components, one can check which data fields always belong to a commercial letter and are thus tax-relevant.

Commercial letters are documents, which refer to a commercial transaction, i.e. all incoming and outgoing documents, which refer to the preparation, the completion, the execution, change or cancellation of a commercial transaction. The following are described as commercial and business letters e.g.

- > invoices
- > quotations (if they result in orders)
- > purchase orders/orders
- > order confirmations
- > letters of credit
- > reminders
- > balance confirmations
- > bank statements

It must be pointed out that these tax-relevant examples could exist as original digitally-created documents or their contents as original digitally-created documents.

Commercial letters do not include those documents which did not result in the conclusion of a commercial transaction. It could be non-productive to await the outcome of a quotation or an inquiry, in order to then decide whether there is correspondence which has to be stored. One can assume that in practice the company sets up basic rules whereby this part of a specific procurement or sales process should be stored regardless of the subsequent outcome.

<sup>72</sup> cf. BMF statement dated 07.11.1995, L.c.

<sup>73</sup> Section I 1, Para. 2, L.c.



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### QUALIFICATION BY MEANS OF THE DOCUMENTS PRESENTED TO THE AUDITOR IN THE PREVIOUS AUDITING PERIODS

The bulk of the previously presented documents are based on evaluations printed from the computer systems. Thus in practice, it has to be basically possible to draw a conclusion on the corresponding procedure.

#### EXAMPLES FOR THE GOVERNMENT TAX AUDIT OF PRESENTED DOCUMENTS/DATA

PREVIOUSLY: DOCUMENTS PRESENTED	NEW: DATA PRESENTED (poss. contains additional information)
Outgoing invoice in paper form	Data, which has been used for the outgoing invoice: <ul style="list-style-type: none"> <li>&gt; Customer data</li> <li>&gt; Item/Material data</li> <li>&gt; Price data</li> <li>&gt; Order data</li> </ul>
Open item lists e.g. for customers on a key date DDMMYYYY <sup>74</sup>	Customer open items: Data for outgoing invoices and other customer documents, which have not been settled by the key date DDMMYYYY = open items
Summary of fixed assets <sup>75</sup> as a list	Transactions for each inventory as a file: <ul style="list-style-type: none"> <li>&gt; Additions</li> <li>&gt; Retirements</li> <li>&gt; Transfer postings</li> <li>&gt; Write-downs</li> <li>&gt; Write-ups</li> </ul>

Table 2: Sample overview for documents (previous) and data (new) presented for the government tax audit

Of these four options to trace tax-relevant data, the retrograde approach has proven itself in practice, i.e. starting from the balance sheet or profit and loss statement to the data source in the computer systems.

#### PRACTICAL TIP:

Compare the marked balance sheet and P&L items with the systems and processes in matrix form. This will then give all persons involved very quickly an answer as to which computer systems and processes are affected, even in the case of heterogeneous system landscapes.

<sup>74</sup> The sequence of letters DDMMYYYY are wildcards for stating the day, month, year.

<sup>75</sup> cf. for definition of the summary of fixed assets as an integral part of the financial statements § 268 Section 2 HGB.

**Example of an impact analysis:**

	SAP 4.70 Enterprise	Customer Consignment Processing	DATEV	SFinm32 Banking SW	EXCEL Provisions Schedule	Acces-DB Guarantees	Excel Calc. of General Provisions	GV POS system	Assist-Import/Export Processing trimondo	Web-Portal
<b>BALANCE SHEET</b>										
Fixed assets	X								X	
Intangible assets	X									
Raw mat. supplies & consumables	X								X	
Cash on hand	X							X		
Banks	X			X						
Accounts receivables	X	X(1)					X		X	
Provisions	X				X	X				
Liabilities	X								X	X(2)
<b>P&amp;L</b>										
Revenues	X	X(1)						X	X	
Expenses f. raw mat., suppl. & cons.	X								X	X(2)
Income from investments	X									
Interest income	X									
Income from depreciation										
General provisions for receivables	X						X			
Wages/Salaries	X		X							
Expenses f. employee pension plans deprec. etc.	X		X							
Depreciation	X									
etc.										

Notes::

- (1) Consumption confirmations by mail with CSV file  
Internal application in SAP
- (2) Weekly incoming invoices in paper form and as ASCII file for BTC1 processing

Figure 2: Example of an impact analysis

## 4.3.2 SPECIAL CASE – EMAILS

### 4.3.2.1 TAX RELEVANCE OF EMAILS

In the meantime, in practice, emails are assuming more and more the document and confirmation function with regards to contents in terms of the GoBS<sup>77</sup>. They can include e.g. commercial letters<sup>78</sup> or accounting instructions (e.g. instructions to reverse provisions with reason), which are tax relevant.

77 cf. BMF statement dated 07.11.1995, L.c.  
78 cf. Definition in Sect. 4.3.1



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In addition, it must be pointed out that, in practice, emails are also used as just envelopes for attachments (=means of transport). In the BMF FAQ<sup>79</sup> a travel expense report in a spreadsheet format is mentioned as an example. In this case, each taxpayer has to decide for himself/herself whether he considers the „envelope“ as tax relevant or not.

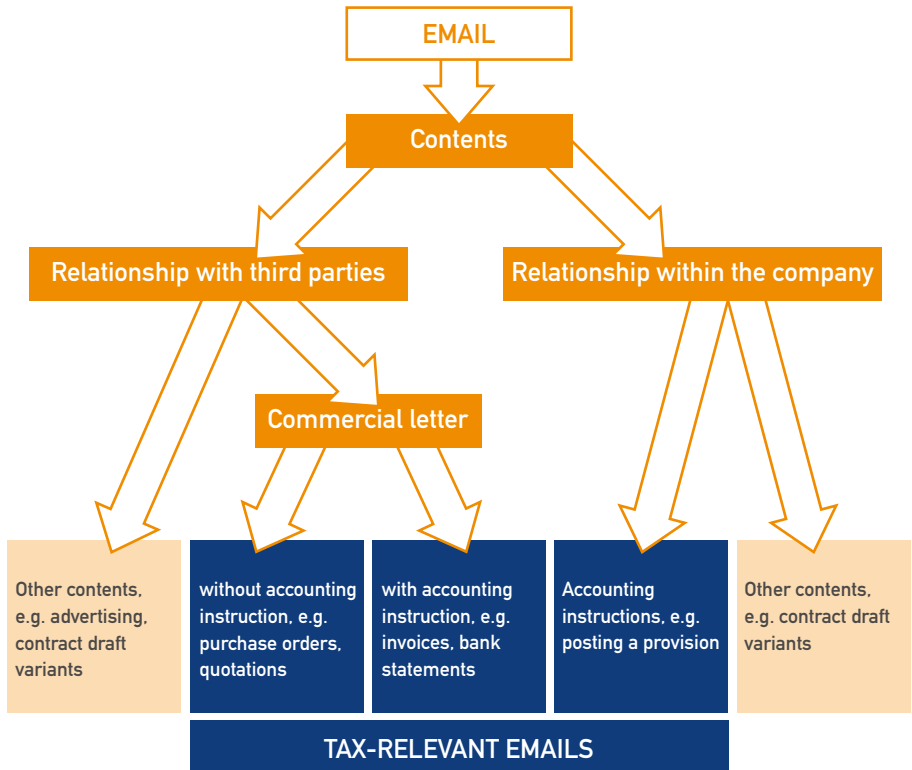


Figure 3: Systematisation of email contents acc. to tax relevance

### 4.3.2.2 MACHINE READABILITY

The machine readability can be derived by implementing the document function in terms of theGoBS<sup>80</sup>:

- a) Original paper documents
- b) Scanned original paper documents, filed in optical archives in an unchangeable format (e.g. PDF or TIFF format)
- c) Original digitally-created document contents in a machine-readable format that however cannot be evaluated
- d) Original digitally-created document contents in a machine-readable format that can be evaluated

The machine readability basically only comes into question for emails for the letters c) or d). It depends whether an email, which is e.g. in the form of a commercial letter, has a qualified digital signature or not. If the digital signature is missing, then point c) applies, as these email contents are only continuous text, which is not suitable for automatic processing. In this case, the email can be stored in an image format (e.g. PDF or TIFF). In the case of an email with a qualified digital signature, e.g. invoices in terms of §14 UstG, point d) applies. In this case, the machine readability is based solely on the signature and the result of the check. Here, the storage including the signature key and the result of the validity check of the signature key has to be in the original format, to allow the authenticity of the sender to be checked.

### 4.3.3 SPECIAL CASE – SPREADSHEET FILES

#### 4.3.3.1 TAX RELEVANCE OF THE SPREADSHEET FILE

There can be a tax relevance for spreadsheet files (e.g. MS-EXCEL<sup>®</sup>), as shown in Section 4.3.2.1. As an example for tax-relevant file from spreadsheet programs, one can name calculations for the amount of provisions, interest and depreciation calculations. In addition one can also come across a spreadsheet file in practice which is just a data file (without calculations), e.g. a download of data from SAP R/3 or SAP ERP 5.0/6.0 to MS-EXCEL<sup>®</sup> for upload in a non-SAP system or visa versa. Each taxpayer has to decide for himself/herself whether s/he stores such data files or proves congruence between source and target system by means of a procedural documentation or a process documentation.

Auditing acceptability in terms of GoBS is not ensured for tax-relevant spreadsheet files which have to be stored. This means that e.g. an EXCEL<sup>®</sup> file can be changed without having to store the change history, which makes it possible to trace the changes over a specific period. It is the responsibility of each company to meet the auditing acceptability itself by means of suitable organisational measures, e.g. by storing alongside the original format also an image file with time data (e.g. in PDF or TIFF format), so that an auditor can compare the image of the file with the file itself.

#### 4.3.3.2 MACHINE READABILITY OF THE SPREADSHEET FILE

The machine readability of files from spreadsheet programs is only restricted. An examination carried out by the auditor can only be based on the visible formulas to calculate the cell contents in the original file. Evaluation in terms of the GDPdU is not ensured in this case, as the file with the formula itself is not suitable for automatic processing in a computer system.

## 4 Challenges in Implementing the GDPdU

### 4.3.4 SPECIAL CASE – WORD PROCESSING FILES

#### 4.3.4.1 TAX RELEVANCE OF THE WORD PROCESSING FILE

If the word processing system is used as a typewriter and the created file printed for transmission, then the word processing file does not have to be stored in the original format (e.g. MS-WORD®), even if it has a tax-related content. The record retention requirement is then based on the printed tax-relevant document or on the stored image, e.g. WORD® document converted into an image format such as e.g. PDF or as a scanned image document.

Something else could apply if this word processing file has a qualified digital signature. Here the same requirements as for the machine readability of emails with qualified digital signature have to be taken into account (cf. Section 4.3.22) for the automatic evaluation of the signature and the results of the signature check.

#### 4.3.4.2 MACHINE READABILITY OF THE WORD PROCESSING FILE

Basically the machine readability of the qualified digital signature is not ensured apart from the case described in Sect. 4.3.4.1.<sup>81</sup>

### 4.3.5 DATABASE OUTSIDE SAP

The following formats refer only to relational database systems. With Office tools such as e.g. MS-Access, complex office applications are often used which also have to be examined for tax relevance. Mostly the data volume exceeds limits which can no longer be processed with a spreadsheet programme.

If results from such a database system generate an input for the Accounting Department (e.g. calculations of commissions, bonuses, processing of warrantees as a base for the calculations of provisions etc.) then the data of the database system is tax relevant and is subject to the auditor's right to data access.

In general, it is not possible to find either a change history in these systems nor can the read-only access with write-protection be guaranteed and a restriction of the period be set up. Extensive programming skills are required to set up Z1 access to such database.

#### PRACTICAL TIP:

A basis can be created for data media transfer (Z3) of historical data with periodic "freezing" of a file status and its audit-proof filing in the file management system or a document management system (DMS).

### 4.3.6 ELECTRONIC DOCUMENTS

#### 4.3.6.1 COMMERCIAL LETTERS AND ACCOUNTING DOCUMENTS

The electronic transmission of commercial letters or accounting records already existed before the implementation of the GDPdU and the qualified signature. Many companies carry out this transmission by means of EDI (Electronic Data Interchange).

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81 cf. BMF FAQ, Sect. III, Question 4, Lc., and also ZVEI comment Lc.

In most cases, the received EDI files are transmitted to an ERP system for automatic processing. To do this, the EDI file basically has to be converted into a so-called in-house format specified by the ERP system. The in-house format at SAP is named IDOC (Intermediate Document). Thus the question arises as to which of the electronic documents transmitted in this manner are tax relevant and if necessary whether both formats – EDI and IDOC – have to be stored.

#### 4.3.6.2 TAX RELEVANCE

An EDI file / DOC is tax relevant, if it is an electronic commercial letter with regards to contents (e.g. incoming / outgoing invoice, delivery note, order, order confirmation, quotation, which becomes an order). Furthermore an EDI file / IDOC is tax relevant, if its contents have a document / confirmation function in terms of GoB (no posting without document – the SAP accounting record is not meant in this case). There are a number of EDI files / IDOCs, which without electronic means would exist as accounting instructions in paper form (e.g. travel expense accounting, which an external service provider has carried out for the employee's employer and where the amount to be paid to the employee is transmitted to the employer by EDI /IDOC).

#### 4.3.6.3 DOES ONLY THE EDI FILE OR ONLY THE IDOC OR BOTH FALL UNDER THE RECORD RETENTION REQUIREMENTS?

If the electronic document is regarded to be tax relevant, then the question is what has to happen with the EDI file at the EDI converter and the IDOC acquired from it with regard to the record retention requirements, if communication has taken place directly between two SAP systems without EDI. The Institut der Wirtschaftsprüfer in Deutschland e. V. (IDW) assumes that both formats have to be kept in terms of GoB / GoBS<sup>82</sup> (cf. also BMF FAQ<sup>83</sup>). In comparison ZVEI in its comment on the BMF FAQ argues that this leads to a double storage of data and is not in line with the principle of proportionality. It thus has to be rejected.<sup>84</sup> Ultimately the decision has to be made by each taxpayer.

### 4.4 QUESTIONS/COMMENTS ON THE ACCESS TYPES Z1–Z3

#### 4.4.1 OPTIONAL USE OF THE ACCESS TYPES Z1–Z3

The auditor can use the access rights Z1/Z2 and Z3 optionally. This access can be used alternatively or in parallel. The separation of tax-relevant and non-tax-relevant data has to be technically realized for the access types Z1/Z2 and Z3 after qualifying the data in accordance with its tax relevance. The separation of the data or the setting up of the access to do so is a considerable time and cost factor, which has to be borne by the taxpayer himself/herself due to his/her obligation to cooperate in acc. with §200 Sect. 1 Cl. 2 in conjunction with §147 Sect. 5 and Sect. 6 Cl. 3 AO.

It has to be recorded that the objective scope of the audit has not been enlarged by the three access types in terms of §194 AO.<sup>85</sup> However the intensiveness of the audit will increase distinctly due to the now possible auditing of the entire database (previously normally only spot tests) and the evaluation options on the computer system of the taxpayer used by the auditor (Z1/ Z2). The same applies for the use of the auditing software IDEA® within the scope of the data media transfer (Z3). The auditor now has the technical options to analyse a large amount of data within a short time, which in the case of paper-based audits could previously only be evaluated if a considerable amount of time was spent on it. We can only hope that in the medium term the duration of the audits for the individual taxpayer will be clearly reduced.

82 cf. IDW RS FAIT 2, Generally Accepted Accounting Principles when using electronic commerce, Chapter 5.5 Storage when using EDI, lit. 46 ff WPg 2003, Pg. 1258 ff.

83 Section III, Question 7, c.I.

84 cf. ZVEI comment, Section III, Question 6, I.c.

85 BMF statement dated 16.07.2001, Section I, Cl. 4, I.c.



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### 4.4.2 DIRECT ACCESS (Z1)

The taxpayer has to develop an authorisation concept<sup>86</sup> for the access type Z1 for the read-only-access and set up user roles for the auditor in the production systems. If it is possible for the auditor to access non-tax-relevant data or transactions in the production system due to non restrictive authorisations, then the taxpayer cannot rely on a ban on using the information thus gained.

With regard to the direct access, it has to be clarified:

- > How do the user roles have to be set up or be equipped? (Authorisation concept)
- > How can data which is not tax-relevant be separated from the access by the auditor (including the separation of the company code – legal entity)?
- > How can it be ensured that the auditor does not change data on the production system? (Read-only access)
- > How can data access for the audit period be restricted in the computer systems/procedures? (Period restriction)
- > How can the auditor's access be logged (registering of the auditor's access)?

The answers to the questions will be given in Chapter 5 as part of the technical implementation in SAP systems.

The taxpayer has to brief the auditor.<sup>87</sup> This briefing should point out the associations and the structures of the taxpayer's computer systems to the auditor. It depends on the individual skills of the auditor whether an application training of the system is necessary. The auditor does not have to have a comprehensive training of the operation of a SAP or Datev system, as the fiscal authorities have carried out in-house training courses.

The auditor has to be given information on the volume of documents which are available to him for the period of the audit within the scope of the data access. It should be permitted to postpone extensive evaluations to off-peak times during the day or night with regards to the immediate data access required in the AO<sup>88</sup>. Interferences in day-to-day business process can thus be avoided.

The implementation of the GDPdU requirements is turning out to be downright problematic with regard to the time restrictions on the auditing period, as they are generally not planned in the software systems used. In general, employees in the system have an optional access to data which is in the system, regardless to which period the data belongs. Only a few systems permit a time restriction of the data access – either by means of technical implementation (e.g. in the SAP systems R/3 or ERP 5.0/6.0) or by means of administrative regulations, whereby data which has to be examined is transferred into an evaluation system (e.g. by creating specified intervals of tax-relevant data) and the auditor gets access rights to this transferred dataset.

It seems to be absolutely necessary that the companies deal with the planning and implementation of authorisations for auditors at an early stage.

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86 cf. Recommendations on the scope of authorisation in Section 4.4.3, if the taxpayer's employee carries out the evaluation for the auditor.

87 cf. Obligations to cooperate; BMF statement dated 16.07.2001, Section I 2 a, I.c.

88 cf. §146 Sect. 5 AO in the amended version by the Tax Reduction Act of 23.10.2000, I.c.

#### PRACTICAL TIP:

After formulating the auditor roles, please check without fail these roles in the production systems or in a quality assurance system with a production-related dataset:

- > Which access do the authorisations permit?
- > Does the interaction of the individual authorisations work with the period check, e.g. when going from one transaction into another?

### 4.4.3 INDIRECT ACCESS (Z2)

In the case of Z2 access, the taxpayer's employee will carry out the evaluation of the data according to the specifications of the auditor.

#### PRACTICAL TIP:

The taxpayer's employee has a second user master in the production system with the same scope of authorisations as the auditor. With his/her knowledge of the system, s/he gives the auditor an insight into the ERP/Accounting system.

As the employee does not work with the same scope of authorisations as an auditor, it is ensured that the solutions to the questions mentioned in Section 4.4.2 will also be taken into account within the scope of the Z2 access.

It is however also conceivable and sensible in individual cases to be able to answer questions placed by the auditor, to get a system administrator to allow the auditor to look in system data, which can only be seen with the system administrator's access rights (Z2), due to the restrictions on the auditor's read-only-access.

### 4.4.4 DATA MEDIA TRANSFER (Z3)

The following has to be clarified for the data media transfer:

- > How can one define the scope of the tax-relevant data to be transferred together with the auditor, so that the questions asked by the auditor can be answered specifically?
- > How can one determine whether the data format of the system can be processed by the auditing software IDEA®?
- > How can the completeness/reconcilability of the data to be transferred be guaranteed?

The solution of the first question requires discussion with the auditor, to exactly define the scope of data required for this and the level of detail by means of his/her intended audit procedures. This should thus avoid, amongst other things, the unnecessary tying up of resources at the taxpayers, which would arise, if an imprecise request from the auditor triggers multiple data evaluation or creation of a data media, before the result in answer to the auditor's question is accepted.

The answers to the second and third questions will be given in Chapter 5 as part of the technical implementation for SAP systems.



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### PRACTICAL TIP:

In practice, there have been auditing cases where the auditor requested all financial accounting data within the scope of the data media transfer, without having made a specific auditor's request.

It is therefore advisable to specify together with the auditor which tax-relevant data s/he requires to examine which facts.

Before passing the data media onto the auditor make a copy for your documents. This copy makes it simpler to trace the auditor's data evaluation in the case of conclusions reached in the audit. If necessary you can also evaluate the database yourself.

In practice, companies are often confronted with insolvable tasks, to grant an auditor the access types Z1 to Z3 on all tax-relevant data over the retention period of 10 years. This is essentially connected with the archiving cycles as well as time restructuring measures on the production database.

### 4.5 SPECIAL TOPICS WITHIN THE SCOPE OF THE DATA ACCESS

#### 4.5.1 ACCESS TO ARCHIVES

##### 4.5.1.1 INDEXING / ATTRIBUTE ASSIGNMENT OF STORED DATA/DOCUMENTS

Electronic archives (e.g. optical archives or DMS) are used in many companies alongside the ERP system to store data, electronic documents and scanned documents which are in the ERP system in connection with posting data.

Depending on the company, these systems are connected to an ERP system or are operated as a stand-alone system.

Basically the indexing or attribute assignment of data/documents takes place in the archiving system itself.<sup>89</sup> If it is connected to an ERP system (e.g. SAP), then the indexing/attribute assignment is done via this ERP system.

### PRACTICAL TIP:

An attribute assignment of data and documents should be carried out by yourselves, even in the case of an electronic archive which is connected to the ERP system, if it has already been given search terms by the ERP system. The system guarantees the auditing acceptability due to the fact that data is stored unchanged in the optical archives and can be refound with a search index.

If at a subsequent date the connection between the ERP system and the optical archives should be suspended (e.g. shutdown/switching off the ERP system), then the data and documents can be refound in the optical archive with the search options.

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<sup>89</sup> So-called integrated archive, cf. BMF FAQ, Section III, Question 3, I.c.

### 4.5.1.2 TAX RELEVANCE

The record retention requirements for tax-relevant documents are specified in § 147 Sect. 1 AO (e.g. received commercial letters such as invoices, orders etc. and original accounting records). Access to these documents has to be granted in acc. with § 147 Sect. 5 AO in electronic form, if they are stored in a form to be reproduced on image carriers or on another data medium (e.g. DVD, hard disc, etc.).<sup>90</sup> The auditor has to be provided with such means, which are required, to make these documents legible at the expense of the taxpayer.<sup>91</sup> In the BFH resolution dated 26.09.2007, the term "such means" is understood to mean that access to the data in the electronic archive has to be made possible to the auditor with the technical facilities existing in the taxpayer's system. The BFH points out that the right to electronic inspection is not only due to the changes in § 147 AO as a result of the implementation of the GDPdU, but was already there in the wording of the law of § 200 Sect. 1 Cl. 2 in conjunction with § 147 Sect. 5 Cl. 1 AO.

### 4.5.1.3 ACCESS TO TAX-RELEVANT DATA IN ELECTRONIC ARCHIVES (Z1/ Z2)

The same conditions apply here as for the Z1 access to the accounting system or the ERP system<sup>92</sup>. In particular, a solution has also to be found here to restrict access only to the financial years of the period under review in accordance with the audit ruling.

If access is through an ERP system, which already has a restriction of the period (e.g. SAP), then this topic is basically solved. If on the other hand access is carried out directly in the optical archive, then the period of access has to be restricted, if this is technically feasible. In both cases the auditor has to be provided with a read-only access right. Access to the optical archive has to be set up such that the auditor can only access tax-relevant documents, which are in the ERP system in connection with the posting data, above all in the case of direct access to the optical archive (Z1 access in an integral archive). Non-tax-relevant documents – above all if they are personal documents, e.g. documents of the electronic personnel file such as certificates, etc. – have to be protected from such an access accordingly. This means that the classification has to be made by the taxpayer already when putting the relevant documents in the optical archive, in order to be able to control the access rights by means of the authorisation concept.

#### PRACTICAL TIP:

Pay attention if additional documents other than invoices are scanned and assigned (linked) to the accounting document:

Set up differentiated document types and assign scanned documents accordingly.

## 4.5.2 SYSTEMWECHSEL UND SYSTEMSTILLLEGUNGEN

Hinsichtlich der Themen „Systemwechsel“ und „Systemstilllegung“ gibt es unabhängig von der rechtlichen Diskussion bereits technische Lösungsansätze.

<sup>90</sup> Thus also the opinion in the BFH resolution dated 26.09.2007, cf. the finance court resolution Chapter 8.4.

<sup>91</sup> cf. § 147 Sect. 6 last clause AO.

<sup>92</sup> cf. Also Section 3.2.4/3.2.5 and 4.4.2/4.4.3.



# 4 Challenges in Implementing the GDPdU

## 4.5.2.1 SYSTEMATISATION OF SYSTEM CHANGES AND SYSTEM SHUTDOWNS

Many aspects have to be taken into consideration when changing and shutting down the system. We will try to show this by means of a SAP system change/shutdown in the following diagram:

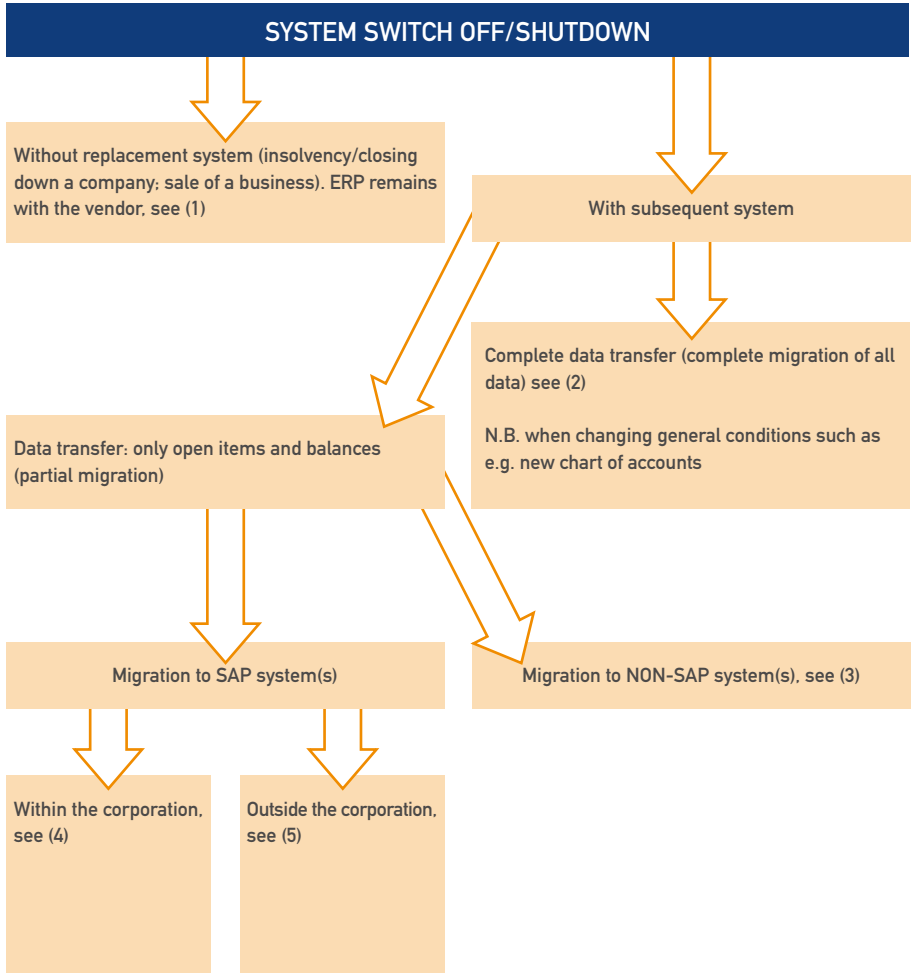


Figure 4: Systematisation for system switch off/system shutdown cases

Explanation for the overview of the system switch off/system shutdown cases:

CASE	DESCRIPTION
(1)	The data of the ERP system to be switched off is not transferred to a/any replacement system(s), as the company has shut down: (voluntary) shutdown/closing down of a company or insolvency
(2)	If all the data of a system to be switched off is transferred and provided that it can be evaluated with the same functional scope as the switched-off system, then it is not necessary to store the data from the old systems for the auditor. The requirements of the auditor with regard to data access can also be satisfied by the system, which has taken over the data. <sup>93</sup>
(3)	Access to SAP data extract from NON-SAP systems is not possible. Either another SAP system is kept to evaluate the data extracts, or before switching off the SAP system the data in the extracts has to be made available for a subsequent evaluation by an evaluation tool by means of an extract splitter.
(4)	It is assumed that the evaluation of the data extracts for data media transfer (view creation) is possible on an existing SAP system in the group of companies, regardless of which company (legal entity) operates the system on an individual basis. This right to evaluation should be confirmed in a contract.
(5)	This case covers the sale of companies, whose buyer also has a SAP system. In this case it can be agreed between seller and buyer that the data extracts be handed over to the buyer, who can evaluate the extracts in his/her own SAP system for auditing purposes.

Table 3: Case structure for system switch off / system shutdown cases

#### 4.5.2.2 RELIEF FROM ACCOUNTING OBLIGATIONS PURSUANT TO §148 AO

It is not possible to generally assess whether a request to the tax office in accordance with §148 AO will be of success, i.e. to grant relief from the accounting obligation to the effect that in cases where the system is switched off or there is data migration only an extract has to be archived or migrated. As is often the case, it depends on the individual case.

If the objective reasons are severe (e.g. high costs in keeping the redundant old systems available, a data extraction in an evaluation system for auditing purposes which is technically not possible to implement or only possible at a high expense), then the chances of success are good. Unfortunately we do not know of any definite reasons or decision criteria and limiting values where a relief from the requirements of the GDPdU with regard to the data to be provided will essentially be granted if the said reasons, criteria and values are fulfilled. If you send a written request, there could be danger that your request is rejected and thus your managerial decision-making powers will be restricted.

<sup>93</sup> cf. BMF FAQ, Section III, Question 13, I.c., as well as ZVEI comment on BMF FAQ as of 15.01.2007, Section III, Question 12, c.I.



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### PRACTICAL TIP:

Depending on each individual case, it might be sensible to include the auditor of your relevant tax office already in the early stage of a project to change or shutdown the system. Talk to him/her about the practical constraints and try to come to an agreement as to which data has to be available for data access retrospectively. Each taxpayer has to decide this for himself/herself.

Whichever way you decide to take, there will be no formal written consent. However if the auditor "nods", then it could possibly defuse the situation for you in this individual case.

### 4.6 TAX AUDIT

#### 4.6.1 AUDITOR'S WORKPLACE

The quality of the PC workplace for an auditor is different from that of an employee. In accordance with his/her job profile, an employee needs access rights to application programs, files, network directories, etc which go beyond the purposes of an audit.

Therefore there has to be a thorough planning when setting up the auditor's workplace with regards to hardware and software equipment.

#### HARDWARE REQUIREMENTS:

- > No internet access
- > No open USB interface
- > No CD/DVD or disk drive

These restrictions should prevent data from the system of the taxpayer being removed from the company without being noticed. Any request for data transfer has to be processed in the manner which has been officially specified in the company and informed to the auditor and the employees. On the other hand the possibility that an auditor transfers files into the network of the taxpayer should also be prevented. In the BMF statement dated 16.07.2001, an upload from the auditor's computer into the network is excluded.<sup>94</sup>

#### SOFTWARE REQUIREMENTS:

- > Absolutely necessary, if SAP is used: SAP-GUI
- > Possibly required:
  - > Access to other programs with tax-relevant data in upstream or downstream systems (e.g. NON-SAP systems)
  - > Office software (e.g. spreadsheets, word processing)<sup>95</sup>

It has been observed in practice that accounting records created with word processing or spreadsheets have been connected (linked) with the accounting record in the ERP system to simplify matters. In these cases, the application programs for word processing or spreadsheets should be provided to the auditor e.g. as a viewer, so that s/he can read the documents.
- > No intranet access

<sup>94</sup> cf. Section 1.2, l.c.

<sup>95</sup> cf. Section 3.2.4.

## 4.6.2 ORGANISATIONAL REQUIREMENTS

We recommend defining guidelines for working practice in which binding regulations for the following subjects are laid down:

- > Clear specification of the contact person(s) for the auditor. Only this person/these persons are authorised to give information verbally and in writing or to create data media or to commission the creation of data media for the auditor. Associated with this is the request to the taxpayer's employees to refer the auditor to the appointed contact person(s) if s/he asks them questions directly.
- > Handling the delivery of the data within the scope of the data media transfer (Z3):
- > How many units of data media are created with identical files in answer to the auditor's question?

Example: 1 x auditor, 1 x Accounting / Tax Department.<sup>96</sup>

- > Encryption (recommended, see Section 4.6.3)
- > Handing out the data media to the auditor (Form)
- > Monitoring the return of the data media

### PRACTICAL TIP:

Before the start of the audit

- > clarify the internal competences to support the auditor with regard to specialist/tax and IT questions
- > test the authorisations: How far does the Z1 access go?
- > test the organisational process to create a data medium (Z3 access)

If a variety of data media are created at the request of the auditor during the audit, we recommend creating a list of which data media with what content were handed over to the auditor and when. On the one hand, this list helps to overview the data which has been provided for the audit, on the other hand to monitor the return of the individual data medium.

### PRACTICAL TIP:

Ask for all data media to be returned, to reduce the risk of data media landing in unauthorised hands.

## 4.6.3 DATA PROTECTION FOR DATA MEDIA

A data medium which has been created for the auditor can contain highly sensitive company data, which the taxpayer would like to protect as well as possible. Once the data has been imported into the auditor's own computer, it is normally well protected from unauthorised access by the cryptographic coding of the computer's hard disc. The data medium as such is a weak point in the data security. It is easy to move, can get lost or be stolen, either in the company on the way from being created to being handed over to the auditor or when in the sphere of influence of the auditor.

Der Außenprüfer darf nach Auffassung der Finanzverwaltung und des Finanzgerichts Thüringen empfangene Datenträger aus den Geschäftsräumen des Steuerpflichtigen entfernen, z. B. um sie im Amt weiter auszuwerten. Auf diesem Weg können dem Außenprüfer ausgehändigte Datenträger verloren gehen.

<sup>96</sup> cf. Sect. 4.4.4.

## 4 Challenges in Implementing the GDPdU

According to the fiscal authorities and the Finance Court in Thuringia, the auditor may remove the received data medium from the taxpayer's business premises, e.g. in order to continue evaluating it in his/her office. In this way the data medium handed over to the auditor could be lost.

We recommend encoding the data medium. It has to be possible for the auditor to decode the data. As no software from the taxpayer may be installed on his/her auditing computer, the only way is to hand over the programme to decode the data to the auditor together with the transferred data on the data medium. With the programme it has to be possible to carry out the decoding directly on the data medium, as e.g. it is not allowed to install it on the auditor's own computer for licensing reasons. The transferred files are protected by a password. The password is transmitted to the auditor separately.

Examples for encoder software:

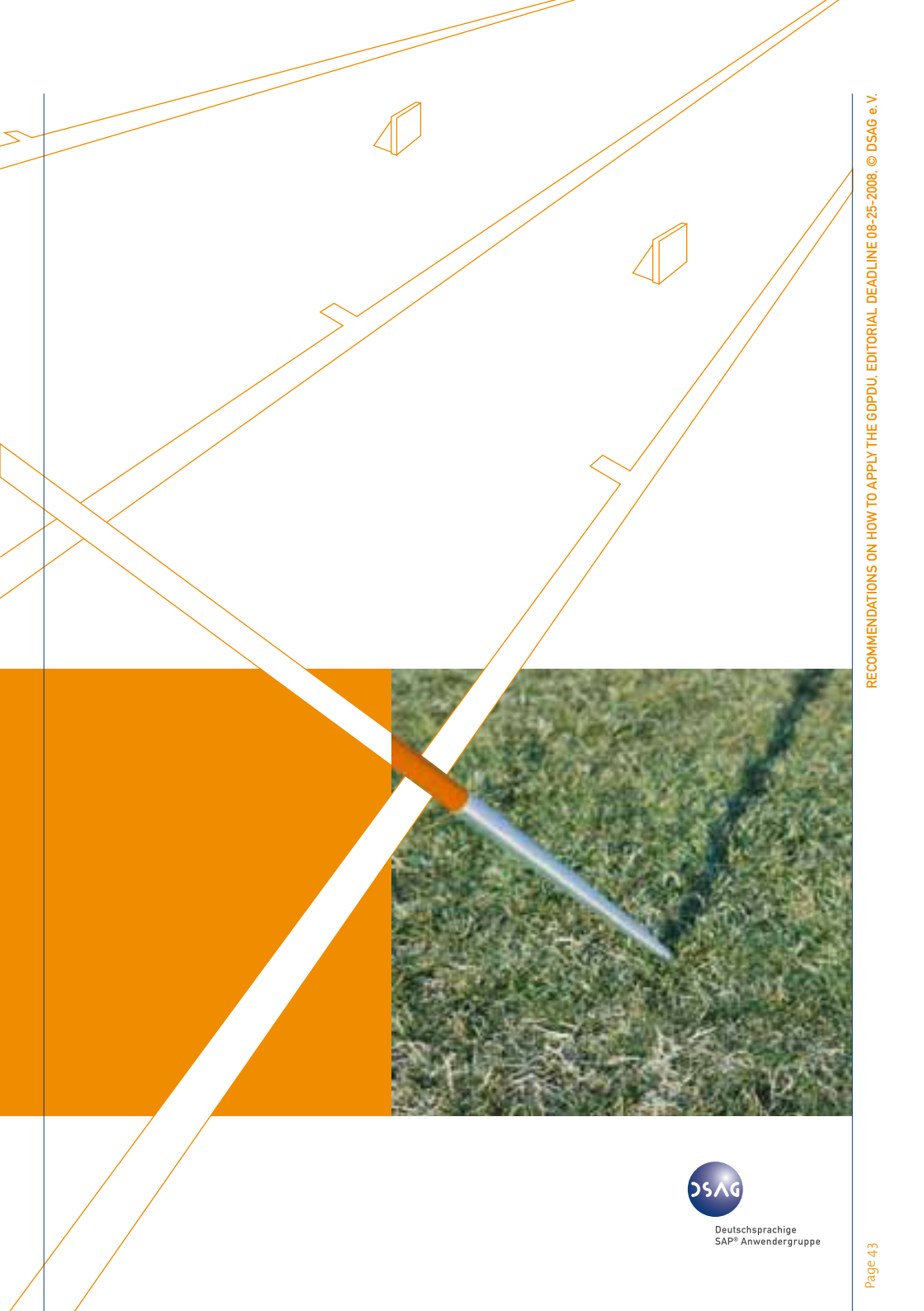
- > TrueCrypt (OpenSource)  
see: <http://de.wikipedia.org/wiki/TrueCrypt>
- > SafeGuard private crypto  
see: <http://www.utimaco.de/C12570CF0030C00A/CurrentBaseLink/W26K9K784270BELDE>

### PRACTICAL TIP:

If you recognise that the auditor will ask for tax-relevant data on machine-readable data media (Access type Z3), start talking to the auditor about how the process of transferring data with encryption should be carried out already in the run up to the audit once you have received the audit ruling.

The time-frame between the discussion and the start of the audit can be used to overcome the technical and organisational hurdles to ensure a smooth data medium transfer from the start of the audit.

Alongside the encryption of the data media, another approach can be discussed, i.e. that the data from the data medium is imported immediately by the auditor on the premises of the auditing company and the data medium is returned directly, whereby it should be made available by the company for any queries. In this respect, an encryption would not be necessary.



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## 5 *Technical Implementation in SAP Systems*

### 5.1 SAP SYSTEMS

SAP supplies the DART function for the systems

- > R/2 Release 6.0
- > R/3 from Release 3.1 to 4.7
- > ERP 5.0 (ECC 5.0) and ERP 6.0 (ECC 6.0)

In addition, there is also a solution on the basis of Querys for the SAP Business One.<sup>98</sup>

### 5.2 FUNCTIONAL ENHANCEMENTS FROM THIRD PARTY SUPPLIERS

Due to the complex scope it will not be possible to have a final fully-developed GDPdU tool. All things considered, the available solutions for GDPdU functions within the SAP system or outside it are all to be considered as solutions, where the main justification for existence is aimed at accessing data in an economically sensible manner. They are mostly suppliers of filing systems which have been upgraded with functions to meet the GDPdU requirements and which make up only one component in the entire GDPdU solution.

It depends, amongst others, on the following as to which tool or solution is good/better or functional/not so functional:

- > Costs
- > Requirements from the industry
- > Requirements based on the size of the company and
- > Requirements based on (established) system landscapes.

The decision is left to the relevant taxpayer.

### 5.3 FIELD CATALOGUE OF TAX-RELEVANT DATA

A catalogue of tables/table fields (field catalogue<sup>99</sup>) is stored in SAP systems, which shows fields which qualify as tax relevant by the WG GDPdU, but only in SAP systems without the module HCM<sup>100</sup> (Human Capital Management) from Release R/2 6.0 and R/3 3.11. This catalogue is the starting basis for checking which data in the company's SAP system could be tax relevant for individual companies.

At this point, we would like to point out that each taxpayer has to adapt the DSAG field catalogue to the specification of the company or industry.<sup>101</sup>

The auditing relevance of the field catalogue put together by the WG GDPdU is a dataset about which there should be no further need for discussion between the fiscal authorities and the company. It was and still is the intention of the WG GDPdU to establish a common definition of the tax-relevant data fields for SAP as a starting basis. It should be possible to apply this catalogue collection indiscriminately in the entire area of application of German taxation laws.

The scope of data is continually updated at the initiative of the WG GDPdU on the basis of feedback from practical experience from our user companies and contacts with the fiscal authorities.<sup>102</sup>

We have an intensive contact to SAP to ensure that the update of the data catalogue is implemented into the SAP systems by SAP speedily.

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98 cf. see SAP Notes 1012531.

99 See SAP transaction FTWCS, Sect. 5.5.6.

100 cf. with HCM Sect. 5.6.

101 cf. Sect. 5.5.7.

102 cf. SAP Notes 582583.

## 5.4 TECHNICAL Z1 / Z2 ACCESS

Although it is not possible to set up a "Read-Only User" in many NON SAP systems, it does not pose a great problem for the taxpayers within the scope of the SAP standard.

However in the case of heterogeneous system landscape with SAP and NON SAP systems, in some cases this can possibly not be implemented at all or only at a great expense. There is a need to deal with the topic of data access intensively just from the fact that access granted intentionally or unintentionally to the auditor on non tax-relevant data does not result in a ban on using the information thus gained. If it is not possible to separate access in which data can be changed from reading access or tax-relevant from non tax-relevant transactions (e.g. data protection of trade association information such as medical records of the doctor to be separated from the invoice), then the auditor may not get this authorisation. On the other hand access to tax-relevant data has to be provided to the auditor in one way or another.<sup>103</sup>

There are of course problems which the auditor has, which can be solved with different solutions (transactions, programs). They all result in the same objective, there can only be differences in the ways used to display the results if additional data is displayed in one way or the other in addition. The auditor roles for the SAP systems originated by taking these solutions and considerations into account. The WG GDPdU has decided that the functions, which allow for tax-relevant differentiation and read-only access while effectively checking the period, have priority. This would mean for example in our opinion, that the critical transactions

SE16 / SE16N and

SE16	Derivate Data Browser (table contents display)
SE17	General Table Display
SA38	ABAP / 4 Reporting (direct calls for programmes/reports)

cannot be used by the auditor. The evaluation of tables is possible with transactions SE16, SE16N and SE16 derivatives as well as SE17, which make the classification of tax relevance by the taxpayers irrelevant. E.g. the auditor could see all the company code related data in table xxxx, without the restriction on company code nnnn in his/her user role becoming effective. Thus the scope of the audit specified in the audit ruling would be exceeded.

Transaction SA38 shows the amount of systems and reports available in the system and provides the option to execute them without differentiating between programs/reports that have been activated or deactivated, whether they are tax relevant or not, or whether they permit an update function or a display-only function.

Access requests by auditors for Z1 access cannot be granted by using the above-mentioned critical transactions.

<sup>103</sup> cf. on this topic Finance Court Rhineland Palatinate, judgement dated 20.01.2005, z.: 4 K 2167/04, EFG 2005, Pg. 667.

## 5 Technical Implementation in SAP Systems

### 5.4.1 SAMPLE AUTHORISATION ROLES FOR AUDITORS

The scope of authorisations developed by the WG GDPdU has been converted into authorisation roles, which are in line with the scope of the data catalogue<sup>104</sup>. All specified sample auditor roles can be found with transaction PFCG in SAP R/3 or SAP ERP 5.0/6.0 under the generic name SAP\_AUDITOR\_TAX\*. These sample auditor roles can be seen as proposals for organising authorisations in each individual company and should therefore not be used without critically examining the contents and developing it for the specific field of application.

Currently the following roles are contained in the SAP standard in August 2008 and after integrating the SAP Notes 830736 and 925217.















20 Roles found		
Role	Type	Role name
SAP_AUDITOR_TAX_A		AIS - Tax Audit, Central Authorizations (Authorization)
SAP_AUDITOR_TAX_AA		AIS - Tax Audit, Asset Accounting
SAP_AUDITOR_TAX_AA_A		AIS - Tax Audit Asset Accounting (Authorization)
SAP_AUDITOR_TAX_CML		AIS - Steuerprüfung CML
SAP_AUDITOR_TAX_CML_A		AIS - Tax Audit CML (Authorization)
SAP_AUDITOR_TAX_COPS		AIS - Tax Audit, Controlling / Project System
SAP_AUDITOR_TAX_COPS_A		AIS - Tax Audit Controlling/Project System (Authorization)
SAP_AUDITOR_TAX_DART		AIS - Tax Audit DART
SAP_AUDITOR_TAX_DART_A		AIS - Tax Audit DART (Authorization)
SAP_AUDITOR_TAX_FI		AIS - Tax Audit, Financials
SAP_AUDITOR_TAX_FL_A		AIS - Tax Audit Financial Accounting (Authorization)
SAP_AUDITOR_TAX_FITV		AIS Tax Audit Travel Expenses
SAP_AUDITOR_TAX_FITV_A		AIS Tax Audit Travel Expenses (Authorizations)
SAP_AUDITOR_TAX_HR		HR-DE Steuerprüfung § 147 AO (Muster)
SAP_AUDITOR_TAX_MM		AIS - Tax Audit, Materials Management
SAP_AUDITOR_TAX_MM_A		AIS - Tax Audit Materials Management (Authorization)
SAP_AUDITOR_TAX_SD		AIS - Tax Audit, Sales and Distribution
SAP_AUDITOR_TAX_SD_A		AIS - Tax Audit Sales and Distribution (Authorization)
SAP_AUDITOR_TAX_TR		AIS - Tax Audit, Treasury
SAP_AUDITOR_TAX_TR_A		AIS - Tax Audit Treasury (Authorization)

Figure 5: Overview of the sample roles for auditors SAP\_AUDITOR\_TAX\_\*

<sup>104</sup> cf. Sect. 5.5.6.

Information for the Financial Accounting role (FI):

> **ACCESS RIGHTS FOR THE CASH JOURNAL**

They are not included in the menu or in the authorisation roles. In our opinion, cash accounting is a subledger for the G/L account "Cash". The system posts all cash transactions, which have been recorded in the cash journal, on a 1:1 basis as a record on the cash account in the general ledger. All information on cash transactions is visible to the auditor when accessing the general ledger data.

> **ACCESS RIGHTS ON DATA IN THE SPECIAL LEDGER**

Special ledgers are not used in every system. They are activated as a second general ledger if it is essential to meet specific reporting requirements. The data collected in the special ledger is not necessarily tax relevant.

As the setting up of a system for a special ledger always has to satisfy the needs of the taxpayer individually, there cannot be any general template for a sample role. On a case by case basis, the taxpayer can create the information rights for auditors with regard to special ledgers according to his/her own circumstances and to bundle them into a customized auditor role<sup>105</sup>.

The following figure shows the role menu for the sample role SAP\_AUDITOR\_TAX\_FI for the FI module on the top menu level.

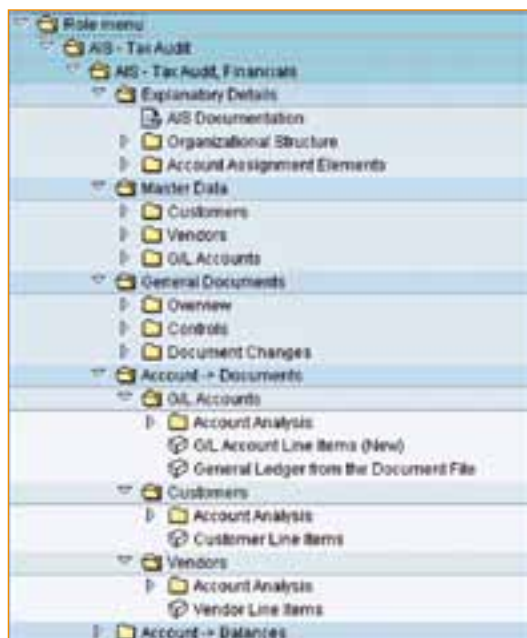


Figure 6: Breakdown of the sample auditor role for Finance

105 cf. Sect. 5.4.3.

## 5 Technical Implementation in SAP Systems



Figure 7: Sample role menu SAP\_AUDITOR\_TAX\_FI

The submenus are shown as an example for the menu points Master Data → Customers and Master Data → Vendors.



Figure 8: Partial breakdown of menu SAP\_AUDITOR\_TAX\_FI

## 5.4.2 DART ACCESS FOR AUDITORS

The WG GDPdU is already dealing with further developments for a Z1 access by the auditor on data extracts, which have been created with the Data Retention Tool (DART), without wanting to restrict the access to online databases. An initial approach can already be seen in the auditor menu.<sup>106</sup> Two individual roles have been generated which on the one hand adopt information functions from the DART menu and on the other hand adopt the transaction and report authorisations from the DART tool:

SAP_AUDITOR_TAX_DART	AIS Tax Audit DART = User menu without authorisations
SAP_AUDITOR_TAX_DART_A	AIS Tax Audit DART (Authorisation) = Authorisations without user menu

The following figure shows the breakdown of the role menu for the sample role SAP\_AUDITOR\_TAX\_DART.

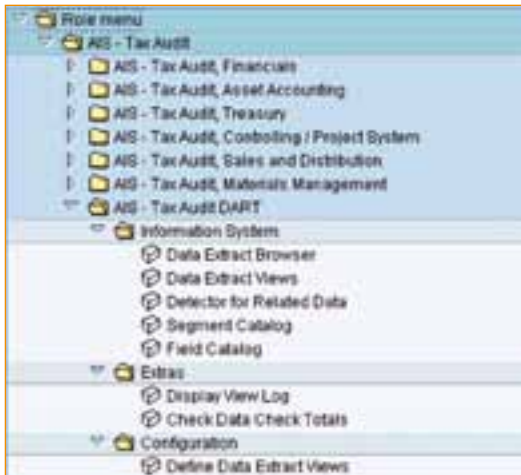


Figure 9: Breakdown of submenu DART

The functions included in the sample role SAP\_AUDITOR\_TAX\_DART are aimed at the right to read DART data extracts. Their use requires an exact development of the authorisation roles to control the access of the auditor specifically.

The taxpayer is responsible for deciding whether DART authorisations are granted to an auditor and if so to what extent. Depending on the assessment of the tax payer and the qualifications of the auditor, the DART access rights of an auditor can be designed differently. The following overview could serve as an example for a possible allocation of tasks between the taxpayer and the auditor:

<sup>106</sup> See: SAP Notes 935189 GDPdU: Enhancements in the composite role SAP\_AUDITOR\_TAX.

## 5 Technical Implementation in SAP Systems

TASK	TASK ASSIGNMENT FOR ...	
	AUDITOR	TAXPAYER
Create DART extracts	no	statutory task
Display DART extract (DART browser)	possible	yes
Create view definition	possible	yes
Create view files	no	statutory task
Display view (View log display with direct access to view data)	possible	yes

Table 4: Possible auditing rights for DART

The role SAP\_AUDITOR\_TAX\_DART\_A AIS Tax Audit DART (Authorisation) contains the following transactions and reports for access to DART extracts:

TRANSACTION	DESCRIPTION
FTWF	Data extract browser
FTWH	Data extract views
FTWCS	Segment catalog
FTWCF	Field catalog
FTWN	Display view log
FTWD	Verify data checksum
FTWY	Define data extract views
S_P6D_40000026	Associated data detector

Table 5: Scope of transaction/report for the auditor role in DART

Below an overview of the current auditor roles (as of August 2008):

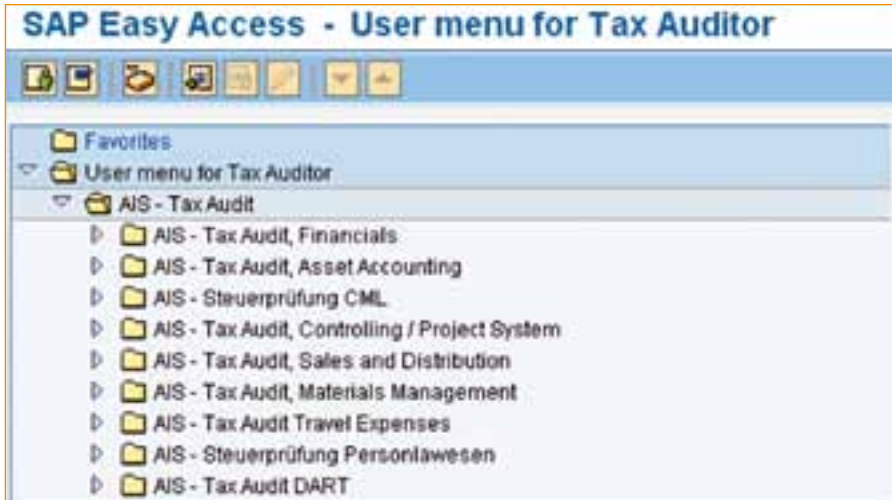


Figure 10: Maximum scope of the SAP sample auditor roles, as of July 2008

### 5.4.3 COMPANY-SPECIFIC AUDITOR ROLES

To define the individual auditor roles we suggest copying the SAP sample auditor roles in your own namespace and enhancing them with company developments to the authorisations for transactions and reports, and to add authorisations for organisational units, account groups for customer accounts/vendor accounts/general ledger accounts, chart of accounts, etc. Changes to the sample auditor roles when importing SAP Notes/Support Packages do not necessarily have an impact on the auditing rights in the taxpayer's system.

An individual role should be created to adopt customized transactions and reports, see details in 5.4.4.

The proposed roles have been copied in the following example

from      SAP\_AUDITOR\_TAX\*  
to         Z\_AUDITOR\_TAX\*

"Z" stands for an optional name chosen by the taxpayer with regard to the customer namespaces.



## 5 Technical Implementation in SAP Systems

COMPOSITE ROLES Z_AUDITOR_TAX		
TRANSACTION ROLES (MODULE-SPECIFIC MENUS)	AUTHORISATION ROLES (MODULE-SPECIFIC AUTHORISATIONS WITHOUT MENUS)	OTHER COMMENTS
	Z_AUDITOR_TAX_A	Central authorisations for devices, spoolers etc.
Z_AUDITOR_TAX_FI	Z_AUDITOR_TAX_FI_A	
Z_AUDITOR_TAX_MM	Z_AUDITOR_TAX_MM_A	
etc.	etc.	Proposed roles for other modules
Z_AUDITOR_TAX_FI_Z	Z_AUDITOR_TAX_FI_Z_A	Roles for customized enhancements, see Section 5.4.4
etc.	etc.	Additional customized roles for other modules

Table 6: Overview of customized naming conventions for auditor roles

If support packages have been imported, we recommend comparing the SAP proposed roles with the customized roles, in order to establish changes as a basis for the maintenance of customized auditor roles. To do this, SAP provides two different types of role comparison functions to compare roles for SAP/DSAG standard versus the company's own type.

- > Report RSUSR050 (Transaction S\_BCE\_68001777) is available for this in the user info system (Transaction SUII). The two roles to be compared are entered into the input fields for "Role A" and "Role B".



Figure 11: Initial screen of Report RSUSR050

- > Transaction PFCG Role Maintenance provides a tool for role comparison. Alternatively transaction ROLE\_CMP can be called directly.

Starting with one role, the other role is specified for comparison.

Access in the role comparison via the menu path in transaction PFCG:  
Aids → Role Comparison Tool.

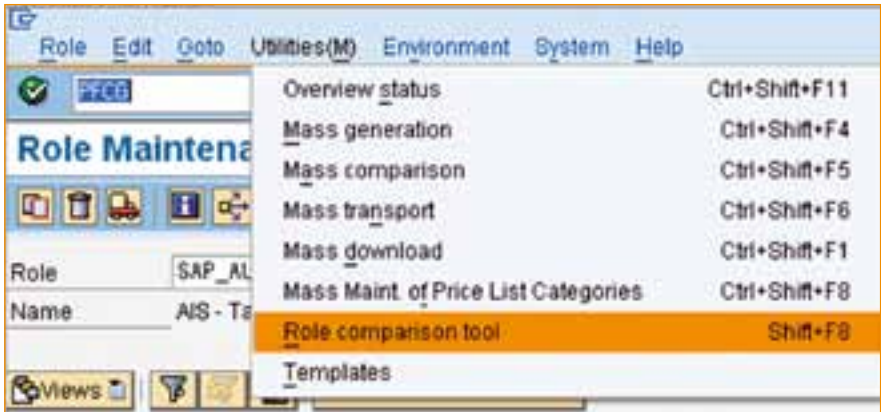


Figure 12: Access to function PFCG with role comparison

Selection of the comparative role.



Figure 13: Selection of the comparative role

## 5 Technical Implementation in SAP Systems

Results list of the role comparison:

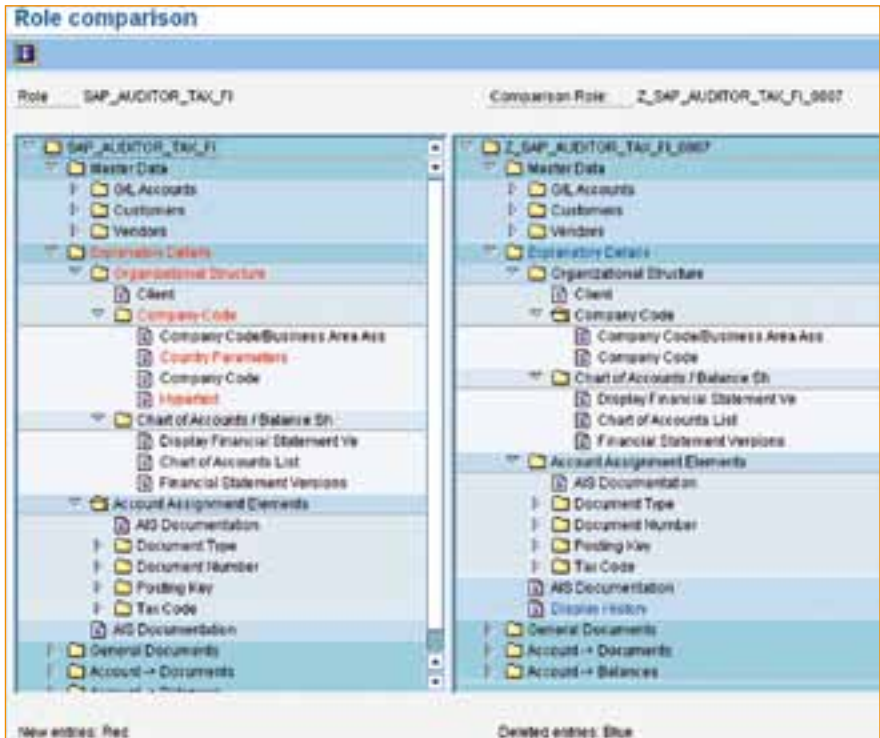


Figure 14: Results list of the role comparison

If necessary, up-to-date SAP Notes have to be incorporated manually into the company roles.

### 5.4.4 ADJUSTMENTS OF AUDITOR ROLES DUE TO CUSTOMER DEVELOPMENTS

SAP sample auditor menus and SAP sample auditor transaction roles should not be changed, as there is a risk of overwriting customized changes when importing SAP Notes or Support Packages.<sup>107</sup> In the case of customer developments, we recommend defining their own supplementary roles specifically for the module.

For example, the company's own report or transaction authorisations could be adopted in customized supplementary roles (e.g. authorisation to download SAP evaluations in a separate network directory for the auditor). All „analysis options existing in the system“ should be available for the auditor in accordance with the BMF statement dated 16.07.2001.<sup>108</sup> In our opinion, the access is restricted to information reports that are actually executable and used by the taxpayer,<sup>109</sup> as the taxpayer has to be in a position to be able to assess the information rights granted to the auditor at any time. The taxpayer will not be able to assess functions in the software that are not used.

<sup>107</sup> cf. Sect. 5.4.3.

<sup>108</sup> cf. BMF statement dated 16.07.2001, Section I 2a, L.c., and BMF FAQ, as of 23.01.2008, Section III, Question 12 L.c.

<sup>109</sup> cf. ZVEI comment on BMF FAQ, as of 15.01.2007, Section III, Question 12 L.c.; cf. also Section 3.2.4.

Customer developments of information transactions and reports also have to be provided to the auditor. These individual reports probably have more functions than the standard reports and can be of benefit to the auditor. If these customer developments access selected logical databases such as e.g. DDF for Customers, KDF for Vendors, SDF for G/L Accounts etc.<sup>110</sup>, then the period check also applies to these transactions and reports. Some applications have to be enhanced individually to include the period restriction, if the data retrieval was not implemented via logical databases which have the time check module.<sup>111</sup>

The following table shows a proposal as to how the naming convention for in-house authorisation roles for customized enhancements can be developed.

COMPOSITE ROLES Z_AUDITOR_TAX		
TRANSACTION ROLES (MODULE-SPECIFIC MENUS)	AUTHORISATION ROLES (MODULE-SPECIFIC AUTHORISATIONS WITHOUT MENUS)	OTHER COMMENTS
Z_AUDITOR_TAX_FI_Z	Z_AUDITOR_TAX_FI_Z_A	Customized supplementary roles for FI module
Z_AUDITOR_TAX_MM_Z	Z_AUDITOR_TAX_MM_Z_A	Customized supplementary roles for MM module
etc.	etc.	

Table 7: Proposal for naming convention for auditor roles – customer enhancement

#### 5.4.5 PROJECT AUDITOR ROLE

The auditors should only use the menu which the taxpayer has developed for them. To prevent the auditor switching from the auditor menu to the SAP standard menu, from R/3 Release 4.7 there is the option to maintain an entry with the user names of the auditor and to set the switch for the user menu in the table

**USERS\_SSM Permitted Menus for the Session Manager.**

The system then does not allow this user to switch over to the standard menu.

110 cf. Sect. 5.4.6.4.  
111 cf. SAP Notes 798565

## 5 Technical Implementation in SAP Systems

### 5.4.6 PERIOD CHECK (AUDITING PERIOD)

#### 5.4.6.1 RESTRICTING THE ACCESS RIGHT TO A PERIOD

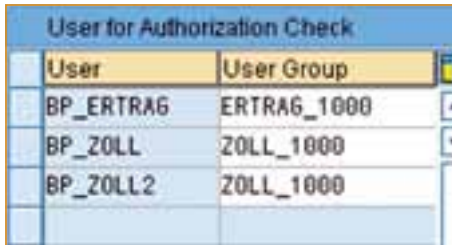
Before a SAP system was enhanced with the GDPdU functions, it was not possible to restrict the access authorisation of a user to a specific period. The function, which was introduced parallel to DART version 2.0 or higher taking into account the statutory provisions, now permits an access period for transaction data to be defined for the auditor. For master data, the access cannot be restricted to data records, which were active in the auditing period i.e. not blocked.

In larger SAP systems with several company codes, several auditors can be working at the same time for e.g. sales/purchases tax, employment tax and income tax for different company codes. The function of the period check has been defined so flexibly that if audits take place at the same time, each auditor can be assigned different access periods.

The period in the audit ruling is stored in the SAP system as the period under review. The function of the period check is controlled over several coactive tables, which are maintained by means of three transactions. The transactions are presented below.

#### 5.4.6.2 TABELLES TPCUSER / TPCUSERN (TRANSACTION TPC2)

With the transaction TPC2, users, i.e. auditors, are assigned to DART user groups.



User	User Group
BP_ERTRAG	ERTRAG_1000
BP_ZOLL	ZOLL_1000
BP_ZOLL2	ZOLL_1000

Figure 15: Pflegendialog der Tabelle TPCUSERN, Transaktion TPC2

#### PRACTICAL TIP:

The user group can be defined freely in DART and can represent an organisational unit or audit type, e.g. audit for income tax, customs or sales/purchases tax.

#### 5.4.6.3 TABLE TPCPROGS

In the table

**TPCPROGS** Check table for the authorisation check programmes.

programmes are entered which are provided for the period independent check. Customized programmes also have to be included here.

A special maintenance dialogue does not exist. Maintenance is carried out with transaction SM31.

The following figure shows an extract in table TPCPROGS.

Appl.	Program
CO	RKRSSELL
EA-TRV	RPLSTTE
EA-TRV	RPR_TRIP_HEADER_DATA
EA-TRV	SAPRPS0F
EA-TRV	SAPRPS01
FI-AA	ANDIK
FI-AA	RAEND01
FI-AA	SAPD8A04
FI-CA	RFKKAB030
FI-CA	RFKKAB05

Figure 16: Extract from table TPCPROGS

#### 5.4.6.4 TABLE TPCPROG (TRANSACTION TPC4)

Programmes/reports or logical databases are entered into table TPCPROG with transaction TPC4 and are thus subjected to the extended examination on permitted periods. This table contains the programmes/reports and logical databases, which the auditor uses for Z1 access. The scope of the table represents a subset of the programmes/reports used in the company on the basis of table TPCPROGS.

Program Name
SAPDEFTI_TR_PERTOGG
SAPDEFTI_TR_PL_CF
SAPDEFTI_TR_POSITIONS
SAPDEKDF
SAPDEKKF
SAPDEKLF
SAPDEGDF
SAPLFVD_MD_VIEU
SAPLMIGO
SAPLTR00
SAPLTPH_TRF_PROTOCOL
SAPRF05L

Figure 17: Extract from table TPCPROG



## 5 Technical Implementation in SAP Systems

### 5.4.6.5 TABLE TPCDATEN (TRANSACTION TPC6)

Transaction TPC6 develops the table

#### TPCDATEN Periods for Authorisation

Check with the periods permitted for access by the auditors. It accesses the user group (see Section 5.4.6.2) and assigns an application (e.g. FI-FI= General Ledger), an organisational unit (e.g. for FI: Company Code) and the permitted periods (Interval from Date to Date) to the user group.

Periods for Authorization Check				
Appl.	Org. Unit	User Group	From Date	To Date
CO	1000	ERTRAG_1000	01.01.2002	31.12.2004
FI-AA	1000	ERTRAG_1000	01.01.2002	31.12.2004
FI-FI	0001	ZOLL_1000	01.01.2003	31.12.2005
FI-FI	1000	ERTRAG_1000	01.01.2002	31.12.2004
LO-MD		ERTRAG_1000	01.01.2002	31.12.2004
LO-MD		ZOLL_1000	01.01.2003	31.12.2005
MM-FT	1000	ZOLL_1000	01.01.2003	31.12.2005
SD	0001	ZOLL_1000	01.01.2003	31.12.2005
SD	1000	ERTRAG_1000	01.01.2002	31.12.2004
SD-FT	1000	ZOLL_1000	01.01.2003	31.12.2005

Figure 18: Extract from table TPCDATEN

The organisational unit has to be entered depending on the context. The following overview shows the possible organisational unit class for each application.

APPLICATION	DESCRIPTION	TABLE TPCDATEN: ORGANISATIONAL UNIT CLASS
FI-FI	Financial Accounting	Company code
CO	Cost Accounting	Controlling area
SD	Sales & Distribution	Sales organisation
EA-TRV	Travel Expense Accounting	Company code
FI-AA	Asset Accounting	Company code
FI-CA	Contract Accounts Receivable and Payable	Company code

APPLICATION	DESCRIPTION	TABLE TPCDATEN: ORGANISATIONAL UNIT CLASS
HR	Human Resource Management	<No organisational unit>
IM-RE	Real Estate	Company code
LO-MD	Logistics Material Master	<No organisational unit>
MM-FT	Foreign Trade Import Processing	Company code
SD-FT	Foreign Trade Export Processing	Sales organisation
TR-LO	Treasury Loans	Company code
TR-TM	Treasury Transaction Management	Company code

Table 8: Transaction TPC6: Context-dependent organisational unit

Only applications assigned in table TPCPROGS may be used here (see Sect. 5.4.6.3).

Note: MM (Logistics) is not processed specifically in the table but is authorised via application FI-FI.

## 5.4.7 RECORD AUDITOR ACTIVITIES (ACTION LOG)

### 5.4.7.1 ACTION LOG AS NEW FUNCTION

The log tools existing in the SAP systems before the GDPdU such as e.g. transactions SM19 and SM20 (Security Audit Logs) or the SQL Audit Log<sup>112</sup> are difficult to read for employees in the specialist departments (e.g. tax specialists) from a purely technical point of view and do not contain the required detailed information for the listed auditor activities in the system.

After having been pressurised by the WG GDPdU, SAP has developed a new log procedure for R/3 Releases from 4.6B, which provides comprehensible information also for persons from the specialist departments. This new form of recording logs the call parameter of transactions and reports, and represents them as an overview of the auditor activities. The SAP term for this logging is Action Log. The log data is stored under the new data object ATAX.

Depending on the intensity of the auditor's access, there could possibly be extensive data collections. If they are not continually examined, then real-time information on the extent of the access and the data objects, which are viewed by the auditor, will be missing.

## 5 Technical Implementation in SAP Systems

### PRACTICAL TIP:

Agree with the specialist departments and IT to carry out the evaluation of the Action Log in short term intervals. There is not much sense in viewing the log data only shortly before the final discussion.

In this way, you get real-time information on the auditing actions of the auditor and the focus points of his/her audit.

Unfortunately the recording function for auditor access is only available at present for the applications FI, FI-AA, MM and HCM. Development requests have been submitted to SAP to register in future also auditor access to data in the SD and CO modules. If there is an urgent need for action from the point of view of the users, please send your feedback to the WG GDPdU.

For contact address see [www.dsag.de](http://www.dsag.de) → Special Interest Groups Overview → Processes → WG GDPdU.

### 5.4.7.2 EVALUATION OF THE ACTION LOG (TRANSACTION SLG1)

All access by the auditor is logged under object ATAX. The evaluation, which is started by means of transaction SLG1, permits the system to access the log data selectively.

The following figure shows the selection screen for transaction SLG1.

The screenshot shows the 'Analyze Application Log' selection screen for transaction SLG1. The screen is divided into several sections:

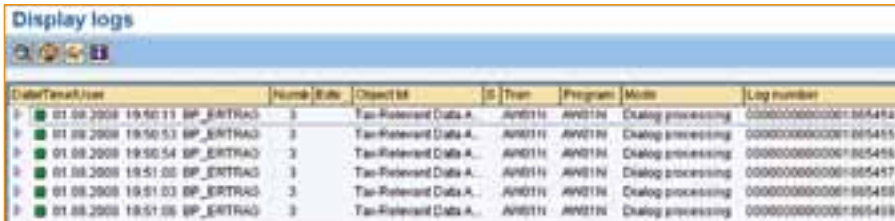
- Object:** ATAX (Tax-Related Data Accesses (Tax Reduction Law))
- Subject:** \*
- External ID:** \*
- Time Restriction:**
  - From (Date/Time): 01.08.2008 09:00:00
  - To (Date/Time): 01.08.2008 23:59:59
- Log Triggered By:**
  - User: SP\_ESTRAG
  - Transaction code: A01B
  - Program: \*
- Log Class:**
  - Only very important logs
  - Only important logs
  - Also less important logs
  - All logs
- Log Creation:**
  - Any
  - Dialog
  - In batch mode
  - Batch input
- Log Source and Formatting:**
  - Format Completely from Database
  - Format Only Header Data from Database
  - Format Completely from Archive

Figure 19: Selection screen for transaction SLG1

Important definition criteria are

- > the entry date and the time of the auditor's access
- > the user name (separating the evaluation by auditor)
- > the transaction code or the programme called by the auditor

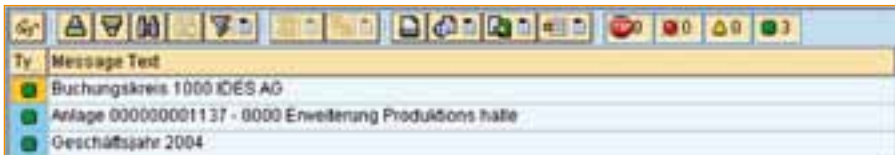
According to the selected selection parameter (in the example: transaction AW01N and input date from 01.08.2008 to 01.08.2008) the list output appears on the screen:



Date/Time/Use	Humid/State	Object ID	S	Trans	Program	Module	Log number
01.08.2008 19:50:11 BP_ERTRAG	3	Tax-Relevant Data A.		AW01N	AW01N	Dialog processing	0000000000001005483
01.08.2008 19:50:53 BP_ERTRAG	3	Tax-Relevant Data A.		AW01N	AW01N	Dialog processing	0000000000001005485
01.08.2008 19:50:54 BP_ERTRAG	3	Tax-Relevant Data A.		AW01N	AW01N	Dialog processing	0000000000001005486
01.08.2008 19:51:00 BP_ERTRAG	3	Tax-Relevant Data A.		AW01N	AW01N	Dialog processing	0000000000001005487
01.08.2008 19:51:03 BP_ERTRAG	3	Tax-Relevant Data A.		AW01N	AW01N	Dialog processing	0000000000001005488
01.08.2008 19:51:06 BP_ERTRAG	3	Tax-Relevant Data A.		AW01N	AW01N	Dialog processing	0000000000001005489

Figure 20: Result display Transaction SLG1 Auditor access

By "opening up" the individual lines by clicking with the mouse on the triangle at the beginning of the line, additional data details on the access are displayed. In the example here, the first line is requested (see selection in Figure 20):



Message Text
Buchungskreis 1000 ICIES AG
Anlage 000000001137 - 0000 Erweiterung Produktions halle
Geschäftsjahr 2004

Figure 21: Display of auditor access details (Transaction SLG1)

Results of the request:

Company code: 1000  
 Asset No.: 1137-0000  
 Description of the asset: Extension of the production hall  
 Fiscal Year: 2004

## 5 Technical Implementation in SAP Systems

### 5.4.7.3 DISPLAY LOG OVERVIEW (WITH REPORT CA\_TAXLOG)

If the logs are printed and archived as a print list, then Report CA\_TAXLOG is available. The content displayed is identical as for transaction SLG1, but in another format.



The screenshot shows the 'Tax-Relevant Data Accesses' selection screen. It has two main sections: 'Select' and 'Time Restriction'. In the 'Select' section, the 'User' field is filled with 'BP\_ERTRAG', 'Transaction' is 'AW01N', and 'Program' is empty. In the 'Time Restriction' section, 'Start Date' is '01.01.2000', 'Start Time' is '00:00:00', 'Finish Date' is '01.12.2000', and 'End Time' is '00:00:00'.

Figure 22: Selection screen of the Report CA\_TAXLOG (Transaction SA38)

With the same selection criteria as for transaction SLG1, the result is as follows:



The screenshot shows the report display for 'Tax-Relevant Data Accesses'. It features a table with the following columns: Log number, User, Date, Transaction code, and Program. The table contains four rows of data, each with a log number and a detailed description of the access.

Log number	User	Date	Transaction code	Program
0000000000105454	BP_ERTRAG	01.06.2000	AW01N	AW01N
Buchungskreis 1000 2005 AG Anlage 000000001137 - 0000 Erweiterung Produktionshalle Geschäftsjahr 2004				
0000000000105455	BP_ERTRAG	01.06.2000	AW01N	AW01N
Buchungskreis 1000 2005 AG Anlage 000000001137 - 0000 Erweiterung Produktionshalle Geschäftsjahr 2004				
0000000000105456	BP_ERTRAG	01.06.2000	AW01N	AW01N
Buchungskreis 1000 2005 AG Anlage 000000001137 - 0000 Erweiterung Produktionshalle Geschäftsjahr 2004				
0000000000105457	BP_ERTRAG	01.06.2000	AW01N	AW01N
Buchungskreis 1000 2005 AG Anlage 000000001136 - 0000 Instandhaltung Geschäftsjahr 2004				

Figure 23: Display of details for auditor access from Report CA\_TAXLOG

After expanding the complete list, one can get a quicker overview with this format than with transaction SLG1 and also carry out a search by relevant terms.

### 5.4.7.4 DELETE LOG INFORMATION (TRANSACTION SLG2)

The Action Log (data of object ATAX) can be deleted after completion of the audit with transaction SLG2.

A previous archiving by means of the archiving object BC\_SBAL is also possible.

#### PRACTICAL TIP:

If there are larger quantities of data due to the log (several auditors are working over a long period), then we recommend archiving and reorganisation, so that on the one hand you can unburden the online database, on the other hand however you can keep an eye on the entire auditing process.

## 5.5 TECHNICAL Z3 ACCESS

### 5.5.1 DART DATA RETENTION TOOL

SAP provides the

#### DATA RETENTION TOOL (DART)

as part of the standard. DART was originally developed for data access by the fiscal authorities in the United States of America (USA). The classification of the tax-relevant data in the USA ("US" table list) is thanks to the initiative of the American „SAP Users' Group (ASUG).

On this basis the WG GDPdU has worked continually to transfer the provisions of German legislation into the tool since 2001 and to build up its own data catalogue with tax-relevant data. In the meantime, the table list "DE" on the one hand maps a large part of the core of the „US" data and on the other hand it has additional data fields with the specific requirements of the German fiscal authorities, such as e.g. the value added tax registration number (USTId).

With regard to DART Version 2.6, the following table displays the relationship between the table lists for the US and DE country versions.

DATA SCOPE	DATA SEGMENTS	FIELDS
Total	446	5.829
Thereof:		
US (exclusively)	5	138
DE (exclusively)	270	3.559
US and DE together	171	2.132

Table 9: Segment volume DART data catalogue – as of DART Version 2.6



## 5 Technical Implementation in SAP Systems

As in the meantime the demand for data media transfer has also become stronger in other countries, in particular EU countries, and statutory regulations have been issued, such as e.g.

Switzerland: Ordinance of the EFD (Swiss Fiscal Authorities) on electronically transmitted data and information (EIDI-V) dated 30th January 2002

Austria: §§131, 132 Bundesabgabenordnung (BAO = Austrian Federal Fiscal Code)

France: Contrôle Fiscal des Comptabilités Informatisées (CFCI = Tax Audit on Computerised Accounting)

Portugal: Portaria n° 321-A/2007.

there has been an impact on the design and configuration of the relevant data tables. Nowadays individual company codes can already be configured to national versions. It is possible to select a "US" or "DE" version within customizing. Nowadays only a small number of data tables (e.g. Sales/Use Tax etc.) are purely American. For German US subsidiaries, it is possible from Release 2.4 also to extract all tax-relevant data (DE and US) in one processing step ("ALL") in order to be able to satisfy local and international legal provisions.

To do this, the tables TXW\_C\_BUKRS have to be maintained with transaction SM31:

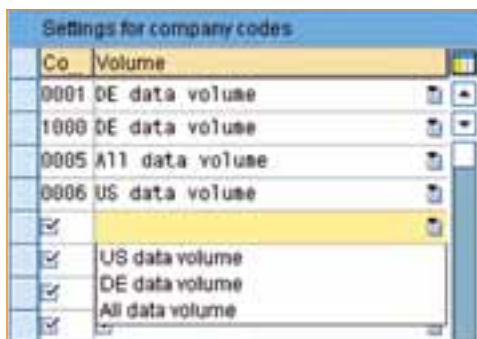


Figure 24: Display customizing of table TXW\_C\_BUKRS (Transaction SM31)

DART generates data extracts as "canned tax data". The DART extract is a set of data, which maps the state of the SAP database as a snapshot when it is being extracted. This allows the original status of datasets from mergers and acquisition scenarios to be "frozen" in case of changes to the charts of accounts<sup>113</sup>.

"A" SAP R/3 System is required to evaluate the DART extracts, which does not necessarily have to be identical with the source system on which the data extracts were once generated. This "evaluation" system however needs to have a release status which is the same or higher than the release status of the generating system. In large companies with different SAP systems or release statuses, it is conceivable to generate DART data extracts locally and to evaluate them on a central system.

<sup>113</sup> Changes to charts of accounts in the course of mergers & acquisitions.

The extract splitter is available from DART Version 2.4 as an alternative, if subsequently no SAP system is available for the evaluation of the DART extract (e.g. migrations from a SAP to a NON-SAP system, see Section 4.5.2). With this function it is possible to atomize extract files into individual segments and to generate one single file in AIS format (with descriptive headers) for each segment. These individual files could be imported into an evaluation tool and evaluated.

## 5.5.2 DELIVERY OF THE DART VERSIONS

The individual DART versions, starting with DART Version 2.0 have been and will be supplied with SAP Notes, which normally can be imported into the systems by means of Support Packages.

The following table shows the number of the Support Package with which the relevant DART version was supplied.

DART VERSION	SAP NOTE/ DATE OF PUBLICATION	SAP SYSTEM							
		SAP R/3 3.1	SAP R/3 4.0	SAP R/3 4.5B	SAP R/3 4.6B	SAP R/3 4.6C	SAP R/3 4.7	SAP ERP 2004	SAP ERP 6.0
2.0	491141 / 05.02.2002	B1	80	58	47	37	06	-	-
2.1	622095 / 13.05.2003	B2	82	60	55	46	12 + 13	-	-
2.2	668943 / 20.01.2004	B4	83	61	56	47	18 + 19	-	-
2.3	702511 / 30.01.2004	-	-	-	-	-	-	02 + 03	-
	763867 / 27.12.2004	B5	85	63	58	49	23	-	-
2.4	810014 / 29.06.2005	-	-	-	-	51	25	08 + 10	-
2.5	1050841 / 26.04.2007	-	-	-	-	55	29	17	10
2.6	1173540 / 11.08.2008	-	-	-	-	58	31	20	14

Table 10: Assignment of the DART delivery to the SAP system



## 5 Technical Implementation in SAP Systems

### 5.5.3 SYSTEM-RELATED DOCUMENTATION/ASSISTANCE FOR DART

The system provides more detailed explanations and tips on this transaction via the menu path

HELP → HELP FOR APPLICATION

from any transaction. For transactions regarding DART, the corresponding passage is drawn from the DART online document with reference to the content.

For example: Transaction FTWQ Configure DART data segments.

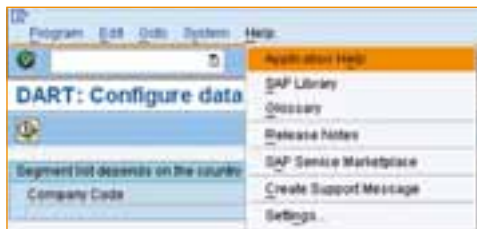


Figure 25: Call the help for DART data segment configuration (Transaction FTWQ)

The call for help leads to the section on Data Segment Configuration:



Figure 26: Display the help for DART data segment configuration (Transaction FTWQ)

## 5.5.4 DART TRANSACTIONS AND REPORTS

Before going into more detail into the individual transactions and reports in the next sections, the following table shows the total scope of the transactions and reports belonging to the DART tool.

TRANSACTION CODE	BRIEF DESCRIPTION OF THE TRANSACTION	CONNECTED TO PROGRAM
FTW0	Tax data retention and reporting	-
FTW1A	Extract data	RTXWCF02
FTWB	Retrieve archived data	RTXWCF10
FTWC	Merge data extracts	RTXWVG01
FTWCF	Field catalog	RTXWCATF
FTWCS	Segment catalog	RTXWCATS
FTWD	Verify data checksums	RTXWCHK2
FTWE	Verify FI control totals	RTXWCHK11
FTWE1	Verify all FI control totals	RTXWCHK4
FTWF	Data extract browser	RTXWQU01
FTWH	Data extract views	RTXWQU03
FTWI	Create background job	RTXWBTCB
FTWJ	Clear retrieved data	RTXWDR0P
FTWK	Delete data extracts	RTXWDEL0
FTWL	Display extract log	RTXWLOG2
FTWM	Rebuild data extract	RTXWCF05
FTWN	Display viewlog	RTXWVWL2
FTWP	Data extracts	SAPMTXWC
FTWQ	Data segments	RTXWSEGS
FTWR	File size worksheet	RTXWSIZE



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TRANSACTION CODE	BRIEF DESCRIPTION OF THE TRANSACTION	CONNECTED TO PROGRAM
FTWS	Transport configuration and logs	RTXWTASK
FTWW	List segment information	RTXWLS01
FTWX	Data file view authority groups	SAPLTXWA
FTWY	Define data extract views	SAPMTXWV
FTWYR	Maintain Segment Relationships	RTXWSM3X
FTWQTD	Number range maintenance: TXW_SN_TD <sup>114</sup>	-
FTWQMD	Number range maintenance: TXW_SN_MD <sup>114</sup>	-
S_P6B_1200272	Data extract splitter	RTXWQU05
S_P6B_1200273	Associated data detector	RTXWQU06
S_P6B_1200274	Display extract splitter log	RTXWQU05

Table 11: List of DART transactions (as of DART 2.6)

### 5.5.5 DART MODULE OVERVIEW

With DART, data can be extracted from different SAP modules for the audit. This assumes that the SAP data archiving has not yet been executed for the extraction period.

Below there is an overview of the extracted data with the assigned archiving objects.

MODULE	NOTATION	EXTRACT OUTLINE	STORAGE OBJECTS <sup>115</sup>
FI	Financials	<ul style="list-style-type: none"> <li>&gt; Financial Documents</li> <li>&gt; Open Item List</li> <li>&gt; Reconciliation FI/CO</li> <li>&gt; Change Documents</li> <li>&gt; Tax Data</li> </ul>	<ul style="list-style-type: none"> <li>&gt; FI_ACCOUNT</li> <li>&gt; FI_ACCPAYB</li> <li>&gt; FI_ACCRECV</li> <li>&gt; FI_BANKS</li> <li>&gt; FI_DOCUMNT</li> <li>&gt; FI_MONTHLY</li> <li>&gt; CHANGEDOCU</li> </ul>
JV	Joint Venture Accounting	> Master Data Joint Venture Accounting	Not Available

<sup>114</sup> cf. SAP Notes 1234641.

<sup>115</sup> cf. [service.sap.com/itm](http://service.sap.com/itm) → Section News → File "Reports and Transactions for Accessing Archived Data", Version 2.7, as of Nov. 2007.

MODULE	NOTATION	EXTRACT OUTLINE	STORAGE OBJECTS
AA	Asset Accounting	<ul style="list-style-type: none"> <li>&gt; Asset Documents</li> <li>&gt; Change Documents</li> </ul>	<ul style="list-style-type: none"> <li>&gt; AM_ASSET</li> <li>&gt; CHANGEDOCU</li> </ul>
CO	Controlling	<ul style="list-style-type: none"> <li>&gt; Controlling Documents</li> <li>&gt; Reconciliation FI/CO</li> <li>&gt; Statistical CO Line Items</li> <li>&gt; Cost Centre Hierarchies</li> <li>&gt; Profit Centre Hierarchies</li> <li>&gt; CO-Primary accounting</li> <li>&gt; CO-Secondary accounting</li> </ul>	<ul style="list-style-type: none"> <li>&gt; COPA2_xxxx</li> <li>&gt; CO_ALEITEM</li> <li>&gt; CO_ALLO_ST</li> <li>&gt; CO_CCMAS</li> <li>&gt; CO_CCTR_EP</li> <li>&gt; CO_CCTR_ID</li> <li>&gt; CO_CCTR_PL</li> <li>&gt; CO_CEL_RCL</li> <li>&gt; CO_COSTCTR</li> <li>&gt; CO_ITEM</li> <li>&gt; CO_KSTRG</li> <li>&gt; CO_ORDER</li> <li>&gt; CO_PROCESS</li> <li>&gt; CO_TOTAL</li> <li>&gt; PM_ORDER</li> <li>&gt; PP_BKFLUSH</li> <li>&gt; PP_ORDER</li> <li>&gt; PR_ORDER</li> <li>&gt; PS_PROJECT</li> <li>&gt; QM_CONTROL</li> </ul>
MM	Material Management	<ul style="list-style-type: none"> <li>&gt; Material Documents</li> <li>&gt; Purchase Orders</li> <li>&gt; Change Documents</li> </ul>	<ul style="list-style-type: none"> <li>&gt; MM_EKKO</li> <li>&gt; MM_MATBEL</li> <li>&gt; MM_MATNR</li> <li>&gt; MM_PREF</li> <li>&gt; MM_REBEL</li> <li>&gt; MM_SPSTOCK</li> <li>&gt; CHANGEDOCU</li> </ul>
SD	Sales & Distribution	<ul style="list-style-type: none"> <li>&gt; Sales Documents</li> <li>&gt; Delivery Documents</li> <li>&gt; Billing Documents</li> <li>&gt; Pricing Conditions</li> <li>Billing Document</li> </ul>	<ul style="list-style-type: none"> <li>&gt; FT_VEIAV</li> <li>&gt; FT_VEXAV</li> <li>&gt; RV_LIKP</li> <li>&gt; SD_VBAK</li> <li>&gt; SD_VBKA</li> <li>&gt; SD_VBRK</li> </ul>
TR (CFM) BP	Corp.Finance Mgmt.(Treasury)	<ul style="list-style-type: none"> <li>&gt; CFM Documents</li> <li>&gt; Historical Transaction Data</li> </ul>	<ul style="list-style-type: none"> <li>&gt; TRTM_FTR</li> </ul>
CL	Consumer Mortgage and Loans	<ul style="list-style-type: none"> <li>&gt; CML Documents</li> </ul>	<ul style="list-style-type: none"> <li>&gt; CMLDOCUMNT</li> </ul>



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MODULE	NOTATION	EXTRACT OUTLINE	STORAGE OBJECTS
RE	Real Estate Management	> Real Estate Documents	<ul style="list-style-type: none"> <li>&gt; RE_BUILDNG</li> <li>&gt; RE_BUSN_EN</li> <li>&gt; RE_MGT_CNT</li> <li>&gt; RE_PROPERTY</li> <li>&gt; RE_RNTL_AG</li> <li>&gt; RE_RNTL_UN</li> <li>&gt; RE_STLM_UN</li> </ul>
TV	Travel Management	> Trip Receipt	> PA_TRAVEL
XX	Customer Enhancements	> Special Ledger	> FI_SL_DATA (*)

Table 12: DART module overview (as of DART 2.6)

(\*) If e.g. the cost-of-sales accounting (FI-SL basis) is used, then it has to be included into the DART scope by the customer.

### 5.5.6 DART SEGMENT/FIELD CATALOGUE (TRANSACTIONS FTWCS/FTWCF)

The transaction FTWCS shows DART data segments which specify from which application and reference table of the production database the master data, transaction data and explanatory data have been integrated into the DART segments.

MD	Set	Segment Name	Segment Description	Reference Table	Ap
MD	GEN	T0W_ACCCAT	Account assignment categories	T1S3	MM
○	●	T0W_ACCDET	Account determination	T0S5 T0S7	AM
		T0W_ACCTYP	Account types		FI
		T0W_ACTIV	Activity master	CSLA	CO
				CSLT	CO
		T0W_ALLOCS	Allocation structures	TRSA	CO
				TRSB	CO
		T0W_ANLA	Asset master data	ANLA	AM
		T0W_ANLB	Depreciation terms	ANLB	AM
		T0W_ANLC	Asset value fields	ANLC	AM
		T0W_ANLZ	Time-dependent asset allocations	ANLZ	AM
		T0W_ASSEBV	Base value indicator for depreciation calculation		AM
		T0W_ASSECLA	Asset classes	ASPA	AM
				ASPT	AM
		T0W_ASSCOF	Cut-off value percentage rates	T0S1P	AM
				T0S1T	AM
		T0W_ASSCOM	Changeover method		AM

Figure 27: Example to display segment catalogue: Fields for all country versions

- MD = Master Data
- GEN = General (all country versions)
- TD = Transaction Data
- DE = only in country version DE
- US = only in country version US

MDP	Set	Segment Name	Segment Description	Reference Table	Ap
TD	DE	TAN_CO_COST_TOTALS	CO Object Cost Totals	COSP	CO
				COSB	CO
				RCCOM_COST	CO
		TAN_CO_BHD	CO Document header (secondary postings)	COBK	CO
		TAN_CO_SPOS	CO Document position (secondary postings)	COEP	CO
		TAN_EDFOR	Travel Agent - General Purpose Text Editor	FTPS	TV
				FTPT	TV
		TAN_EBP	Foreign Trade: Export/Import Header Data	EKP	SO
				VERK	SO
		TAN_EBP	Foreign Trade: Export/Import Item Data	EIPD	SO
				VERK	SO
		TAN_EBEL	Supplemented individual receipt	FTKJ	TV
				FTPS	TV
		TAN_F10TV	View Fields for SAFF10TV	F10TV	FI
		TAN_F1_CP	FI open item	BSD	FI
				BSP	FI
				BSD	FI

Figure 28: Example to display segment catalogue: Fields only country version "DE".

- MD = Master Data
- TD = Transaction Data
- GEN = General (all country versions)
- DE = only in country version DE
- US = only in country version US

The transaction FTWCF provides a view on the data fields contained in detail for each segment (the field catalog).

Segment	Segment Description	CAAT Field	Table	Field Name	Field Description	CAAT Field Description	Field Table	Field in
TAN_CO_BHD	CO Document header (secondary postings)	WAER	WAER	CLNT	3 Client	COBK	WAER	
		NCARB	NCARB	CHRF	4 Controlling area	COBK	NCARB	
		BELNR	CO_BELNR	CHRF	10 Document Number	COBK	BELNR	
		SWAHR	SWAHR	NLMC	4 Fiscal Year	COBK	SWAHR	
		PERID	PERID	NLMC	2 Fiscal Period			
		UNRSD	CO_UNRSD	CHRF	4 CO Business Transaction	COBK	UNRSD	
		BLDAT	CO_BLDAT	DATD	9 Document Date	COBK	BLDAT	
		BLDAT	CO_BLDAT	DATD	9 Posting Date	COBK	BLDAT	
		REFST	CO_REFST	CHRF	1 Document type reference document	COBK	REFST	
		REFBN	CO_REFBN	CHRF	10 Reference Document Number	COBK	REFBN	
		REFBN	CO_REFBN	CHRF	4 Complete code of FI document	COBK	REFBN	
		REFLU	CO_REFLU	NLMC	4 Fiscal year of reference document	COBK	REFLU	
		BLART	CO_BLRTE	CHRF	2 Document type (FI) reference document	COBK	BLART	
		BLART	CO_BLRTE	NLMC	3 Number of posted line items	COBK	BLART	
		ORSHS	CO_ORSHS	CHRF	4 Original CO Business Transaction	COBK	ORSHS	
		PERID	CO_PERID	NLMC	3 Fiscal Period	COBK	PERID	
		PERID	CO_PERID	NLMC	3 To period	COBK	PERID	
		BLART	CO_BLRTE	NLMC	3 Number of posting line & national objects	COBK	BLART	
		WAERS	WAERS	CLNT	3 Controlling area country	COBK	WAERS	
		BLTIT	CO_BLTIT	CHRF	50 Document Header Text	COBK	BLTIT	
		ANORG	ANORG	CHRF	10 Reference Organizational Unit	COBK	ANORG	
		ANTRF	ANTRF	CHRF	5 Reference Transaction	COBK	ANTRF	
		CPUDT	CPUDT	DATD	9 Date for Value Accounting Document Header Entered	COBK	CPUDT	
		UNRSD	UNRSD	CHRF	12 User Name	COBK	UNRSD	

Figure 29: Extract for a DART segment with the relevant field catalog



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**DART 2.6 Field catalog of company code 1000 (DE)**

Segment Name	Segment Description	DART Code	Custom	Field	DART Field Description	Ref Tab	Ref Field	...
TXW_FL_01	Fl Document Header	LDORP	TXW_FL_01	Char	4 Ledger Group	LDORP	LDORP	
		BEHAF	BEHAF_01	Char	1 Document Status	BEHAF	BEHAF	
		LDORP	TXW_FL_01	Char	3 Ledger in General Ledger Accounting			
TXW_FL_02	Free-IL Document Item	WMDT	WMDT	Char	3 Char	WMDT	WMDT	
		SKURS	SKURS	Char	4 Company Code	SKURS	SKURS	
		WYBIB	WYBIB	Char	4 Fiscal year	FAMULEIA	WYBIB	
		FOPOS	FOPOS	Char	3 Posting period	FAMULEIA	FOPOS	
		DOCHR	BEHAF_01	Char	16 Accounting Document Number	FAMULEIA	DOCHR	
		DOCLN	DOCLN	Char	4 3rd Character: Posting Item for Ledger	DOCLN	DOCLN	
		BEHAF	BEHAF_01	Char	16 Accounting Document Number	DOCLN	BEHAF	
		GLJHR	GLJHR	Char	4 Fiscal Year	DOCLN	GLJHR	
		MONAT	MONAT	Char	3 Fiscal Period	DOCLN	MONAT	
		BLZNR	BLZNR	Char	4 Number of Line Item Within Accounting	DOCLN	BLZNR	
		BSCHL	BSCHL	Char	3 Posting key	DOCLN	BSCHL	
		KOART	KOART	Char	1 Account Type	DOCLN	KOART	
		HKONT	HKONT	Char	16 General Ledger Account	DOCLN	HKONT	
		GBBER	GBBER	Char	4 Business Area	DOCLN	GBBER	
		WVAND	TXW_WVAND	Char	4 Trading Partner	DOCLN	WVAND	
		SH_ZS	SH_ZS	Char	1 Control Indicator	DOCLN	SH_ZS	
		WRSTR	TXW_WRSTR	Char	16 Amount in document currency (TC)	DOCLN	WRSTR	
		EMSTR	TXW_EMSTR	Char	16 Amount in Local Currency	DOCLN	EMSTR	
		EMSTR1	TXW_EMSTR1	Char	16 Amount in second local currency (LC2)	DOCLN	EMSTR1	
		EMSTR2	TXW_EMSTR2	Char	16 Amount in third local currency (LC3)	DOCLN	EMSTR2	
		WERS	WERS	Char	3 Week End of Week	DOCLN	WERS	
		NETME	TXW_NETME	Char	16 Total quantity	DOCLN	NETME	
		KOIRS	KOIRS	Char	4 Controlling Area	DOCLN	KOIRS	
		KOITL	KOITL	Char	16 Cost Center	DOCLN	KOITL	
		PKCTR	PKCTR	Char	16 Profit Center	DOCLN	PKCTR	
		BEVAF	BEVAF	Char	3 Consolidation Transaction Type	DOCLN	BEVAF	
		FKDZ	FKDZ	Char	16 Functional Area	DOCLN	FKDZ	
		PARIG	PARIG	Char	4 Trading partner's business area	DOCLN	PARIG	
		SNDRP	SNDRP	Char	16 GC Account Number	DOCLN	SNDRP	
		BEHAF	BEHAF_01	Char	1 Document Status	FAMULEIA	BEHAF	
		LDORP	TXW_FL_01	Char	3 Ledger in General Ledger Accounting			
TXW_FL_03	Fl Item Item	WMDT	WMDT	Char	3 Char	WMDT	WMDT	
		SKURS	SKURS	Char	4 Company Code	SKURS	SKURS	
		KOART	KOART	Char	1 Account Type	SKURS	KOART	
		LEHAF	LEHAF	Char	16 Account Number of Number of Creator	SKURS	LEHAF	

Figure 30: Extract from the DART field catalogue (here segments TXW\_FL\_\*)

A drill-down on entries of the field catalogue is possible in the cells of the "Segment Name" and "Reference Table" columns and provides further information.

On the one hand the fields of the segment are displayed (= Target table for the extract data), see the following figure.

Dictionary: Display Structure

Structure: TXW\_FL\_03 Active

Field Description: Fl Item Item

Navigation: [Icons] | Only Target Fields | Target Fields Only

Component	WYS	Component Name	Table Type	Length	Decimal	Field Description
WMDT	CHAR	WMDT	CHAR	3		3 Char
SKURS	CHAR	SKURS	CHAR	4		4 Company Code
COART	CHAR	COART	CHAR	1		1 Account Type
LEHAF	CHAR	LEHAF	CHAR	16		16 Number of Number of Creator
SKURS	CHAR	SKURS	CHAR	16		16 Customer Number 1
WMDT	CHAR	WMDT	CHAR	3		3 Special IL Indicator
WMDT	CHAR	WMDT	CHAR	3		3 Posting Date
WMDT	CHAR	WMDT	CHAR	16		16 Document Number of the Creating Document
SKURS	CHAR	SKURS	CHAR	16		16 Management Number
SKURS	CHAR	SKURS	CHAR	4		4 Fiscal Year
BEHAF	CHAR	BEHAF_01	CHAR	16		16 Accounting Document Number
SKURS	CHAR	SKURS	CHAR	3		3 Number of Line Item Within Accounting Document

Figure 31: Extract of the data from a segment table

on the other hand the fields of the reference table (= Source table for the extract data), see the following figure.

The screenshot shows the SAP Dictionary: Display Table interface. The table lists various fields with their technical details. The columns are: Field, Technical Name, Data Element, Data Type, Length, Decimals, and Short Description.

Field	Technical Name	Data Element	Data Type	Length	Decimals	Short Description
BANK1	BANK1	CLAT	C	2		Account
BANK2	BANK2	CLAT	C	4		Account Code
BANK3	BANK3	CLAT	C	10		Customer Number 1
BANK4	BANK4	CLAT	C	1		General GL Transaction Type
BANK5	BANK5	CLAT	C	1		General GL Indicator
BANK6	BANK6	CLAT	C	8		Closing Date
BANK7	BANK7	CLAT	C	10		Document Number of the Closing Document
BANK8	BANK8	CLAT	C	10		Equipment Number
BANK9	BANK9	CLAT	C	4		Fiscal Year
BANK10	BANK10	CLAT	C	10		Accounting Document Number
BANK11	BANK11	CLAT	C	6		Number of Lines with Accounting Document

Figure 32. Extract of the data from a reference table

## 5.5.7 FIELD CATALOGUE ENHANCEMENTS FOR CUSTOMER DATA FIELDS

If customer specific enhancements or modifications have been installed in the SAP systems, which generate tax-relevant data and which are not available for the auditor through standard default queries, the scope of the data catalogue has to be enhanced. This is the task of the taxpayer within the scope of options for customer-specific adjustment.<sup>116</sup> Each taxpayer himself/herself is obliged to check the DART data field catalogue and to adjust it for his/her circumstances.<sup>117</sup>

DART distinguishes itself precisely due to the fact that additional fields can be included from existing SAP data tables/structures or data tables for customer developments within a SAP system can be included in the DART data scope. Customer enhancements of existing segment structures are marked as "Customer Includes" in the field catalogue, user-defined tables are converted into user-defined DART segment structures and therefore have to be defined outside the SAP namespace.

The process to include customer tables in the DART data field catalogue is described in the SAP explanations for DART Version 2, which are offered as a PDF to be downloaded from the SAP Service Marketplace.<sup>118</sup>

<sup>116</sup> See also the DSAG member recommendation dated 08.12.2003 "Results from the briefing of the representatives of DSAG e. V. and employees from SAP AG with SAP experts from the fiscal authorities on 08.12.2003 in Bonn", <http://www.dsag.de/fileadmin/media/downloads/2003-12-08-Mitgliederinfo.pdf>.

<sup>117</sup> cf. Sect. 5.5.6.

<sup>118</sup> cf. to DART Version 2.5 the file "DART\_2.5", <http://service.sap.com/dart>, Keyword GDPdU, Media Center (Download); Section on DART customer enhancements, Page 58-63.

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## 5.5.8 DART AUTHORISATIONS

### 5.5.8.1 TOTAL OVERVIEW OF THE DART AUTHORISATION CHECK

A total overview of the authorisations examined when calling the DART transactions (including the basic authorisations) is offered by transaction SU22 Assignment of the Authorisation Objects for the Transaction.

The system shows the quantity of authorisation objects, for which the examination is processed, for the DART transactions FTW\* and S\_P6D\_40000025 / ..26 / ..27 (Package FTW1). The following figure shows an extract from the results list as an example.

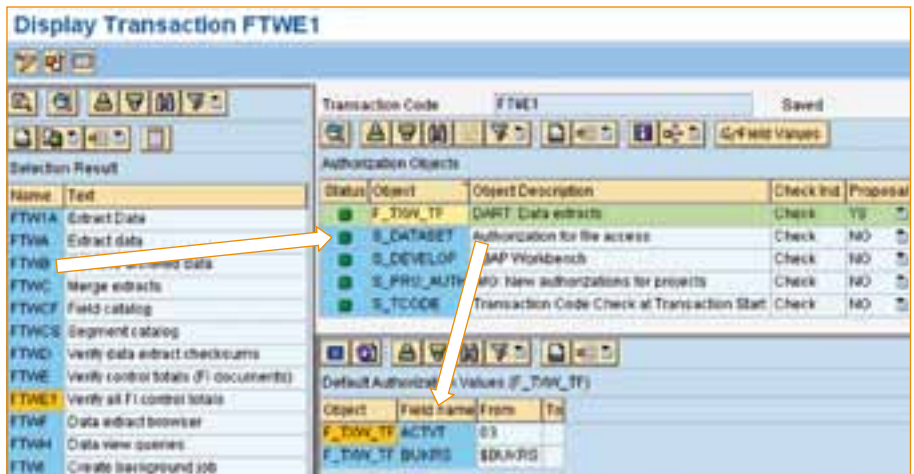


Figure 33: Extract from the results list for transaction SU22

### 5.5.8.2 DART AUTHORISATION OBJECTS

For the authorisation check, the DART tool is based on a few specific authorization objects which are presented below and are explained briefly.

Additional information is offered by the SAP explanations on the DART Version 2.5, which are provided as a download on the SAP Service Marketplace.<sup>119</sup>

119 cf. to DART Version 2.5 the file "DART\_25", section on DART authorisation objects, Page 64-67, I.c.

AUTHORISATION OBJECT	DESCRIPTION	AUTHORISATION FIELDS/EXPLANATIONS	ACTIVITIES
F_TXW_TV	Execute, delete, archive view queries and export on local PC	ACTVT Activity BRGRU Authorisation group BUKRS Company code  Activities 24/25 permit views from a connected archiving system to be filed/retrieved  Activity 61 (export view report into file) supports the export into the file system on the application server	03 Display 06 Delete 24 Archive 25 Retrieve 61 Export
F_TXW_RA	Retrieve archived data or delete retrieved data	BUKRS Company code	
F_TXW_TF	Create, display, delete, archive data extracts	ACTVT Activity BUKRS Company code	01 Add 03 Display 06 Delete 24 Archive 25 Retrieve
F_TXW_TFCF	Configuration of the data extracts	ACTVT Activity	01 Add 03 Display 06 Delete 24 Archive 25 Retrieve
F_TXW_TVC2	Configuration of the data extracts	ACTVT Activity BEGRU Authorisation group  Set up maintenance protection for view files for user groups. The maintenance of the authorisation groups is carried out with transaction FTWX  <b>Prerequisite:</b> The parameters have been set in table TXW_C_GLO: PARAM_NAME AUTH_VIEW_DEF PARAM_VALUE AUTHGRP  <b>Note:</b> The parameter is not set in the standard system	02 Change 03 Display
F_TXW_TVCF	Change configuration of the DART data views	ACTVT Activity	02 Change 03 Display

Table 13: DART authorisation objects

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### 5.5.9 DART RELEASE MAINTENANCE

DART is updated within the scope of the normal delivery logistics120 by means of SAP Notes, which are integrated in Support Packages.

As a result of company requirements, an upgrade to a new DART release can be included in a SAP system with the enclosed special transport by the relevant SAP Note. Each of the relevant companies has to decide to what extent a roll-out can be carried out as a special transport outside the procedures for importing Support Packages or as a normal Support Package upgrade during the year.

One can assume that a DART release will be implemented into the system of the taxpayer with a time lag after its publication by SAP and delivery of the programme enhancements by means of SAP Notes through the Service Marketplace. The normal procedures in the company for quality assurance have to be taken into account for all changes to the installed production systems.

### 5.5.10 PROCEDURE OF DART EXTRACT CREATION

#### 5.5.10.1 SEPARATION OF INCLUDED DATA

Only the data, which is actually generated in the selection period (transaction data), is read for the extraction.

All relevant data such as

- > master data
- > change documents of relevant transaction and master data
- > explanation data
- > dependent tables

is automatically included without the user having to select the data himself/herself, if it is planned in the segment or field catalog.

#### **PRACTICAL TIP:**

Create the DART extracts at the same time as completing the work on the financial statements for the fiscal year (Audit certificate).

Extracts are normally created once a year. If the arising data volume requires mid-year extracts to be created for a part period, then master data up to and including DART 2.3 is included in all these extracts, which have the characteristic values existing for each extraction period. The master data is integrated repeatedly when creating views of several extracts. Actually the last extract for the fiscal year gives the most up-to-date information as it documents the last status achieved.

Alternatively from Version 2.4 as part of data extraction, DART provides the option to exclude the master data for the monthly extracts and to create a pure master data extract separately after extraction of the last period. Since DART 2.4, the new viewer offers the option to evaluate the transaction and master data extracts jointly and to display the data in a common view.

If extracts without master data are created during the year, it is necessary to activate the master data selection in DART customizing (Transaction FTWP). When defining the scope for the individual data extraction run, the master data selection is called after selecting the transaction data segments, and the existing selection for all master data segments is retracted.

---

120 cf. SAP Notes 582583.

The next figure shows an example of this:

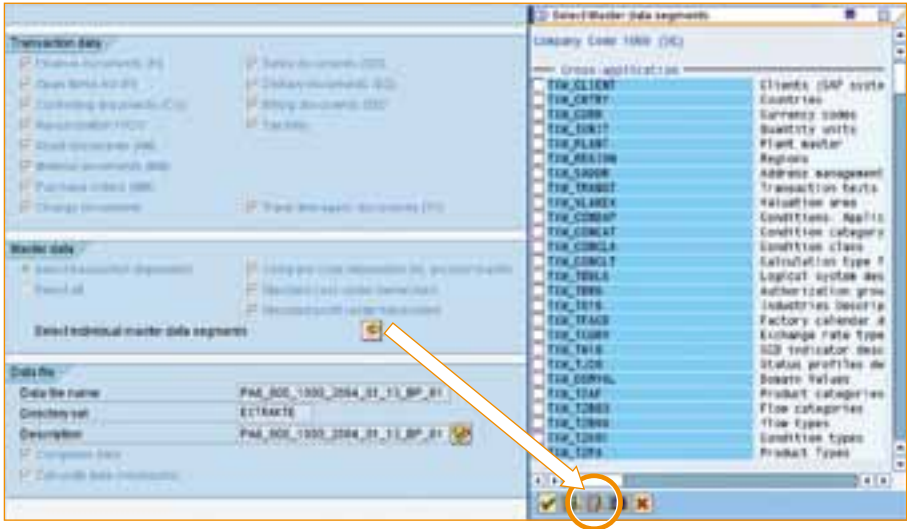


Figure 34: Extract creation without master data

To create the pure master data extract at the end of the fiscal year, the selection has to be adjusted accordingly. This means not selecting any transaction data but instead selecting all the master data.

When extracting transaction and master data parallelly, if there is the possibility to restrict the master data to the master data used in the transaction data, then this option is not available when only master data is extracted. This is due to the fact that in the absence of available transaction data in this extract, no dependencies can be built up between the transaction data and the master data during extraction. This disadvantage does increases the quantity of the extracted data, but in practice the data volume is only insignificantly higher and compared with the monthly master data extraction still reduces the data volume to a considerable extent. The following figure shows the setting for pure master data extraction.

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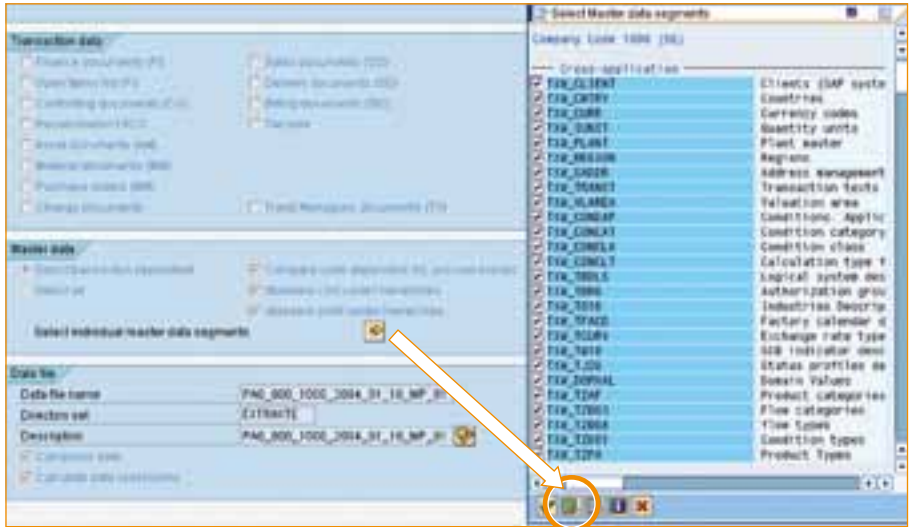


Figure 35: Creation of the pure master data extract

If individual modules are not used and thus no transaction data was transferred into the monthly extracts, then the corresponding master data segments do not need to be extracted. They can be retracted manually by means of the function displayed above.

### PRACTICAL TIP:

Select the master data only from the last extract when creating views for several extracts for one fiscal year and mix it in with the transaction data.

You thus avoid that the master data gets the same account number repeatedly.

If the auditor is interested in the development of the contents of the master data, you can provide him/her with the master data change documents which were extracted automatically by the computer during the extract creation.

Although the data extracts contain the extracted data in text format, they are not suitable for direct reading with a text editor or spreadsheet. We recommend using the extract browser tool to view the data in the extract.

It is basically possible to summarise several company codes into one extract. However one extract for each company code should be generated, if the taxpayer to be audited is not represented by summarising several company codes. In this special case, an extract with several company codes would be conceivable. In view of a future Z1 access of the auditor on data extracts<sup>121</sup>, this would ensure that the auditor may only access the company codes of the taxpayer named in the audit ruling.

121 cf. Section 5.4.2.

The access to extract contents can only be examined at company code level. There is no examination in organisational units of additional data existing in the extract from other modules.

### 5.5.10.2 NAMING CONVENTIONS FOR DART EXTRACTS

Normally one data extract covers all posting periods of a company code for the entire fiscal year (maximum 16 posting periods). A data extract may technically cover maximum 100 data files of 2 GB. Depending on the data volume and thus from the runtime of the extraction, it could be necessary to create data extracts during the year. Thus max. 14 ASCII file sets (1 set with n files for each posting period (without master data), one set for the closing period 13-16 (if used) as well as 1 set with n files for master data (depending on the data volume and specification in the customizing) are generated for one company code and monthly extraction.

The following indications should help to decide how to determine the periodical extract sequence:

- > after month-end closing or end-of-quarter closing, but only after locking the permitted posting period (table T001B)
- > after submitting the advance tax return for sales/purchases tax (posting of last sales/purchases tax corrections and the sales/purchase tax payable are included).

Reasons for non-periodical extractions could be:

- > Data vaulting before shutting down the SAP systems
- > Handing out datasets to the legal successor when selling the company.  
The buyer has taken on the storage of the data and is the contact person for the auditor.
- > Change in the organisational structure: Conversion of the chart of accounts, merging of individual company codes to one single company code or division of one company code into several new company codes by means of consolidation/separation of data on the database.

#### PRACTICAL TIP:

In the case of periodical extract creation for one fiscal year, one must pay attention that it is carried out with only one DART version, as otherwise when subsequently evaluating the data it might not be possible to create a standard view for the whole fiscal year. This applies in particular to data fields, which have been added by a new DART version and thus which are only available for extracts from the time of the implementation of the new DART version.



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### 5.5.10.3 NAMING CONVENTIONS FOR DART EXTRACTS

We recommend carrying out a standard notation of the extract files. The following tables shows, which information should be reflected in the file names and how a naming convention can be structured.

POSITION	CONTENTS (EXAMPLE)	DESCRIPTION
1–3	PA6	System
4	_	Separator
5–7	100	Client number (*)
8	_	Separator
9–12	0001	Company code number
13	_	Separator
14–17	2008	Fiscal year
18	_	Separator
19–20	02	Period <b>from</b> : for monthly or yearly extracts 00 = Year 01–16 = Month Q1–Q4 = Quarter
21	_	Separator
22–23	02	Period <b>to</b> : for monthly or yearly extracts 00 = Year 01–16 = Month Q1–Q4 = Quarter
24	_	Separator
25	B	Data class: (*) For midyear extracts with data splitting: B = Transaction data S = Master data
26	_	Separator
27	P	Indicator for test or production extract: T = Test P = Production
28	_	Separator
29–30	01	Sequence number

Table 14: Naming convention for a data extract

(\*) Components could be dispensed with, if there is e.g. only a production mandate and complete extracts

According to this naming convention, a data extract could contain this name:

PA6\_800\_1000\_2007\_01\_03\_B\_P\_01

The SAP system will create several extract files automatically and number them consecutively, if the size of an extract file specified in the customizing (recommendation 100 MB) is exceeded. If the total volume of an extract (100 files) is exceeded with this specification, then the value should gradually be adjusted upwards. This function ensures that only files are created whose volume still remains manageable for an evaluation.

#### 5.5.10.4 DEFINITION OF THE LANGUAGE FOR THE DART EXTRACT

As soon as a programme is scheduled in SAP for background processing (batch execution), job scheduling is carried out by default in the language of the registered user. In individual cases, the language would have to be adjusted in the job step, which means additional work and an additional source of error in the handling.

If audits are generally carried out in the relevant local official language, the aforementioned behaviour of the SAP system can lead to help texts in another language than the local official language in the extract.

Especially so, if the extract creation is carried out centrally in the company and not locally.

To get a defined status here, from DART 2.6<sup>122</sup> the language on the selection screen can also be selected during the extract execution. The logon language of the user is specified as a default value.

To get a defined status here, from DART 2.6 the language on the selection screen can also be selected during the extract execution. The logon language of the user is specified as a default value.

Selection criteria	
General	
Company Code	1000 to [ ]
Fiscal Year	2004 to [ ]
Posting Period	01 to [ ]
Ledger	0L
Language	DE ←

Figure 36: Definition of the extraction language

#### 5.5.10.5 DART EXTRACT – PERFORMANCE OPTIMISATION

Extract creation in the past has shown again and again that there are combinations where the extraction of individual segments last excessively long.

Classical areas are the Open Items (especially for G/L accounts), CO secondary postings, the CO total costs and the change documents. SAP has published some SAP Notes<sup>123</sup>; with which remedies can be found by optimising the selection logic or additional databases indexes.

122 cf. SAP Note 1173540 – Upgrade of DART 2.5 to DART 2.6.

123 cf. amongst others SAP Notes 896894, 992803, 1012235, 1225592.

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### 5.5.10.6 DART LOG FOR RECONCILIATION PURPOSES

At the same time as the extract files, administrative data (logs) is created as proof of the compliance and filed in the extract file. It is thus possible:

- > to establish possible differences between SAP data tables and extract totals / reconciliation data immediately after extract creation
- > to establish whether manipulations have taken place in the extract file during future access.

The following screen shows an excerpt from an extract log (Transaction FTW1A) in three parts:

Results for your selection

Segment name	Data records	Segment size
FI Document header	757	135528
FI Document item	2522	999739
New GL Document item	2522	399000
Customer balances	166	16386
Vendor balances	159	9517
GL account balances	367	32561
FI open item	43876	15514915
CO Document header	578	98843
CO Document item	911	149556
CO Document position (secondary postings)	539	98354
CO Document header (secondary postings)	217	28064
CO Object: Cost Totals	2373	298358
NR Document header	114	17007

Control totals

CoCd	Pe	Accfy	D/C	Item totals	Items	Account balances
1000	01	D	Credit	3.362.497,77-	43	3.362.497,77-
1000	01	D	Debit	3.990.623,62	46	3.990.623,62
1000	01	K	Credit	2.156.324,21-	270	2.156.324,21-
1000	01	K	Debit	48,00	1	48,00
1000	01	S	Credit	12.791.405,79-	782	12.791.405,79-
1000	01	S	Debit	14.319.556,15	1.360	14.319.556,15

#### Creation of data file

Date and time	13.02.2009 07:57:09
User	ANDRES-R
SAP release	700 / 2.6
Logical system	T90CLNT090
Total file size in MB	25
Execution time (hh:mm:ss)	0:0:37
Data extraction rate (MB/h)	229
File encoding	3 ???
Index record length	186

#### Selection criteria:

Fiscal year	2004
Company code	1000
Period	01
Depreciation area (AN Asset documents)	01
Ledger	0L
<input type="checkbox"/> Flag: Export all master data	
<input checked="" type="checkbox"/> Flag: Extract standard cost center hierarchies	



Figure 37: Three excerpts from the extract log

**PRACTICAL TIP:**  
Please ensure that the switch "Calculate data checksum" is always set for the extraction.

This checksum is the prerequisite to check an extract subsequently for changes even if the SAP data archiving was carried out after the extract creation.

### 5.5.11 DART-BROWSER (TRANSACTION FTWF)

The DART browser shows an overview of the content of a data extract in ALV technology (Advanced List Viewer), see the following figure.

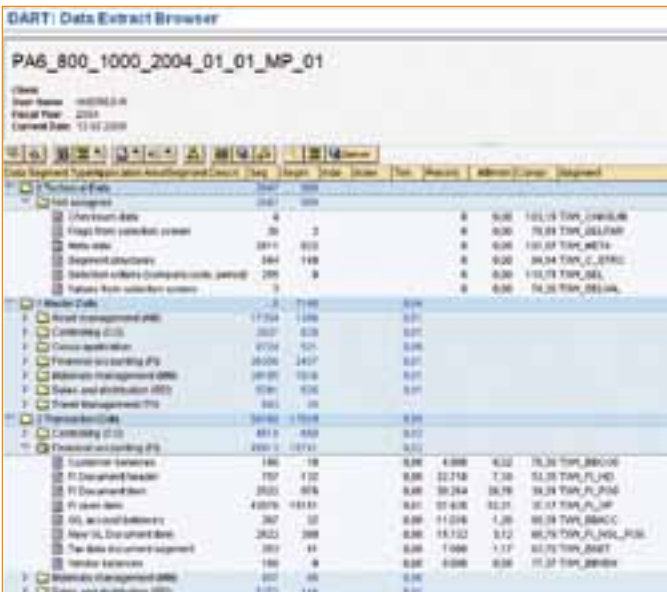


Figure 38: Excerpt from the extract browser (Transaction FTWF)

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The entire screen layout has been revised with DART Release 2.4. The newly introduced presentation of the data with the ALV technology simplifies navigation through the DART datasets compared with the earlier releases.

An authorisation object to control user access at the extract level is missing in the SAP standard. If a user has been allowed the right to access transaction FTWF, then all existing extracts are displayed in the overview. The company code of the extract is only checked for the segments, which have an organisational unit which can be derived from the company code. There is no authorisation protection for all segments without an organisational unit.

### PRACTICAL TIP:<sup>124</sup>

If there is a request to restrict the extract access to specific extracts, then a detour has to be taken.

Pay attention when creating the extract that the name of the extract can be deduced from the selection criteria on which it is based, e.g. it includes a company code number.

Create a customer-defined transaction for each extract, for which you would like to authorise a user.

#### Example:

Create transaction Z\_0001\_FTWF. This executes transaction FTWF with the extract for the Company Code 0001 in the Directory Set nnnn. Give the user only authorisation for the new transaction Z\_0001\_FTWF, not however for FTWF in general.

You can thus limit access to the extracts.

### PRACTICAL TIP:

Up to and including Version 2.3, DART needs its own indexes for view creation. They are no longer required since DART Version 2.4.

The indexes can be deleted with Report RTXWDELI, which is an integral part of the delivery of DART 2.5<sup>125</sup>. This can reduce the size of extracts by up to 30%.

## 5.5.12 RECONCILIATION AND CONTROL OF EXTRACTIONS

### 5.5.12.1 CHECK DATA CHECKSUMS (TRANSACTIONS FTWE/FTWE1)

Controlling data checksums with the transactions

- > Transaction FTWE: check DART control totals for FI documents
- > Transaction FTWE1: check all control totals of the data extract (if data from more than one company code is included in one extract), can be carried out until the original data has been archived.

The following figure shows the screen for transaction FTWE1.

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<sup>124</sup> cf. SAP Note 1058866 DART authorisations at extract level.  
<sup>125</sup> cf. SAP Notes 1050841

**DART: Verify control totals for FI documents**

Data extract: P04\_0001\_1000\_2008\_01\_01\_01\_P04\_0001\_1000\_2008\_01\_01\_01  
 Company code: 1000  
 Fiscal Year: 2008  
 Ledger: 02  
 Date: 12.02.2009

Control totals verification: No error found

Legend:  
 Control totals are valid  
 Control totals are invalid

Item	Period	Account type	Doc. total	Total FI Doc.	Doc.	Total amount	Total amount	Total amount	Total amount	Total amount	Total amount	Total amount	Total amount
0	0	0	3.263.447,75	41	3.263.447,75	3.263.447,75	41	3.263.447,75	41	3.263.447,75	3.263.447,75	41	3.263.447,75
0	0	0	2.156.224,21	270	2.156.224,21	2.156.224,21	270	2.156.224,21	270	2.156.224,21	2.156.224,21	270	2.156.224,21
0	0	0	12.791.495,74	782	12.791.495,74	12.791.495,74	782	12.791.495,74	782	12.791.495,74	12.791.495,74	782	12.791.495,74
0	0	0	16.394.222,77	1063	16.394.222,77	16.394.222,77	1063	16.394.222,77	1063	16.394.222,77	16.394.222,77	1063	16.394.222,77
0	0	0	3.898.612,62	49	3.898.612,62	3.898.612,62	49	3.898.612,62	49	3.898.612,62	3.898.612,62	49	3.898.612,62
0	0	0	49,00	1	49,00	49,00	1	49,00	1	49,00	49,00	1	49,00
0	0	0	14.314.556,15	1.380	14.314.556,15	14.314.556,15	1.380	14.314.556,15	1.380	14.314.556,15	14.314.556,15	1.380	14.314.556,15
0	0	0	16.394.222,77	1063	16.394.222,77	16.394.222,77	1063	16.394.222,77	1063	16.394.222,77	16.394.222,77	1063	16.394.222,77
0	0	0	0,00	0	0,00	0,00	0	0,00	0	0,00	0,00	0	0,00

DART Extrakt      Datenbank

DART Extrakt vs. Datenbank

Figure 39: DART control totals for FI documents

The posting totals of the compact document journal RFBELJ00 have to have identical results for the same selection periods compared with the extract totals from transaction FTWE/FTWE1.

If subsequent postings in a posting period which is actually already closed are required, then more precise organisational regulations are required to reject the already created extracts from the re-opened posting period and to create the new extract(s).

### PRACTICAL TIP:

The extracts have to be checked by the specialist departments after creation.

If subsequent postings have to be made in a closed posting period, then from an organisational point of view one has to ensure that the system runs through a chain of actions consistently:

- > Open the posting period
- > Post the documents
- > Close the posting period
- > Reconcile whether only the intended documents have actually been incorporated into the period and not any other postings without being recognised
- > Trigger new extract creation: file name specifying "new" extract (run number).



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### 5.5.12.2 CHECK THE CHECKSUMS OF THE DATA EXTRACT (TRANSACTION FTWD)

When creating data extracts, checksums can be stored together with the data, provided that the corresponding switch has been set by the extract creation.

With this tool, the checksums are calculated again by means of the extract file(s). This demonstrates the audit-proof storage and its identity is proven by its status at the time of extraction.

The following figure shows an extract of the entire screen layout.



Figure 40: Check data checksum (Transaction FTWD)



Figure 41: Result of the check Transaction FTWD

### 5.5.13 STORAGE OF DART EXTRACT FILES

The DART extract (an ASCII file) is located in the SAP system environment and can be displayed with SAP tools. If a document management system or filing system, which allows the filing of extracts by means of ArchiveLink (and which should preferably be SAP-certified and is implemented as a GOBS-oriented process), is available, then the DART extract files can be stored there. Otherwise another audit-proof data storage or file storage has to be organised.

## 5.5.14 VIEW CREATION

### 5.5.14.1 GENERAL

DART extracts contain a consistent “snapshot” of tax-relevant data, which was created in the past in anticipation of future audits. The dataset serves as a basis to answer auditor requests in digital form.

A written auditor request is converted into a technical view on the DART extract files corresponding to the period. Views permit the specific selection of fields from different data segments (e.g. document header, document line, master data) and the writing of the results in an output file. Results can be written in a new view file or an existing view file can be attached.

From DART Release 2.3, a table with the “dependencies” is available. The dependencies explain the table links to the auditor and contain details as to how segment tables are connected amongst each other. Since DART 2.5, the customer can enhance it by means of transaction FTWYR.

The description standard<sup>126</sup> recommended by the fiscal authorities is not necessary for DART views.

### 5.5.14.2 NAMING CONVENTION FOR VIEWS

When creating views, it has emerged that in practice a descriptive naming quickly reaches its feasible limits. The naming convention described below offers the option to assign the views to an application. The actual function of the views is not mapped in the name of the view definition but in the descriptive text.

POSITION	RECOMMENDATION	IDENTIFICATION
1	Z	Sign for customer namespace
2	_	Separator
3–4	FI	Module indicator, here Financials
5	_	Separator
6	0001	Sequence number

Table 15: Rule for name assignment of view definitions

### 5.5.14.3 DEFINE VIEWS (TRANSACTION FTWY)

The creation of views (as they are called by SAP) for data extracts differs greatly from the relevant DART Release (lower or equal to DART 2.3 and DART 2.4). An extensive description would go beyond the scope of this publication. The orientation should be relatively easy for trained application managers, SAP users with knowledge of SAP Query or ADAP programmers. Nevertheless an orientation training in this topic is recommended well before starting an audit. The SAP Workshop WDE680 offers an in-depth introduction into view creation.

<sup>126</sup> 126 BMF Information for the description standard, I.c.



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The significance of the 'Join Condition' also has to be pointed out, i.e. the way in which the data segments should be connected with the view definition.

In a relational database system a 'Join' is a combination of data records from two or more tables. In a similar way a 'Join' in DART means combining data records from two or more segments into one extract.

The 'Join Condition' can be used as follows:

- > To only select data elements, which exist in all connected data segments, the "inner join"<sup>127</sup> has to be activated.
- > To select all data elements, which fit the selections from the connected data segments, the "outer join"<sup>128</sup> has to be activated.

Some view suggestions exist in the SAP standard. The WG GDPdU and SAP are continually upgrading the view suggestions from practical day to day auditing experiences.

As a first step, standard views for the module FI (1SAP\_FInn and 1SAP\_XXnn; nn = sequence number for differentiation) have been prepared by the WG GDPdU<sup>129</sup> and in the meantime have been delivered by SAP<sup>130</sup>. Additional development requests for views for the modules MM and SD have been submitted by the WG GDPdU to SAP for implementation. At the time of going to press on 11.08.2008 we had unfortunately not yet received a delivery date.

To ensure an easier handling with these new standard views, the view proposals now include

- > all fields of the data segments
- > the selection of all (sensible) fields as selection fields
- > fields in the sequence in which they were arranged upon document entry.

The user has to carry out the following work steps to create his/her own view on the basis of the new standard view proposals.

- > copy the proposal of a standard view into the customer namespace Z\*
- > make a selection of the relevant fields in accordance with the auditor's request
- > delete all data fields not required
- > delete all selection fields not required

As now the maximum (sensible) possible fields for a segment are available in the new FI standard views, the user always has to reduce only the number of fields and the selection conditions to the required volume. Unnecessary fields and selection conditions lead to longer processing times when creating view files.

### 5.5.14.4 CREATE VIEW FILES (TRANSACTION FTWH)

All evaluations of DART extract files are carried out by calling the views to display or immediately create an extract view.

If the evaluation is first called as an online display and then is transferred as an EXCEL® download, then the maximum line number (dependent on the EXCEL® version) for each spreadsheet in EXCEL® has to be taken into account.

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127 For an explanation on the term Join, see Section 8.5.

128 For an explanation on the term Join, see Section 8.5.

129 Here: Subgroup of the WG GDPdU to define standard views.

130 cf. SAP Notes 945615 and 953869.

An online display is restricted to approx. 100,000 lines (technical restriction of ALV) by the system, regardless which values have been specified when executing the view.

#### PRACTICAL TIP:

DSAG recommends carrying out the download only in SAP Audit Format, as the descriptive headers are only included here and they map the significance of the individual columns in a form which IDEA® can interpret automatically.

### 5.5.14.5 NAMING CONVENTIONS VIEW FILES

It makes sense to formulate the file names for view files as descriptively as possible.

The following rules are an example for the name structure:

POSITION	RECOMMENDATION	IDENTIFICATION
1	Z	Sign for customer namespace
2	_	Separator
3–4	FI	Module indicator, here Financials
5	_	Separator
6–9	0001	Company code
10	_	Separator
11–13	001	Sequence number
14	_	Separator
15–30	<Text>	If nec. additional text

Table 16: Rule for name assignment of view file

There is space for additional information in the description text (Length 40 characters).

### 5.5.14.6 PERFORMANCE FOR THE VIEW EXECUTION

In systems with large data volume in the individual segments or very complex views, it has emerged that the viewer based on ALV delivered with DART 2.4 reaches its technical limits with regard to the required temporary memory consumption and then the creation of the view file is aborted.

Until DART 2.6 is generally available, in this case the view logic of the version before DART 2.4 is available. Point 7 of the delivery information for DART 2.4<sup>131</sup> describes how it can be activated. With DART 2.6<sup>132</sup>, a revised view logic is supplied which no longer burdens the temporary memory of a SAP process as was previously the case. With this optimised version of the view logic, it is possible to deal with large data volumes or highly complex views again.

<sup>131</sup> For an explanation on the term Join, see Section 8.5.

<sup>132</sup> For an explanation on the term Join, see Section 8.5.



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### 5.5.14.7 TRANSFER OF DATA CREATED BY EXPORT VIEWS

The DART extract is technically not suitable for importing into the auditing programme IDEA®. Only one export view in the SAP Audit Format can be directly imported and read by IDEA®, as only the SAP Audit Data Format has a field description in the first eight header lines of the file.

#### PRACTICAL TIP:

Please pay attention to the system routes taken by the view file - from the data creation to the generation of the data medium (e.g. burning the CD). If different operating system environments are used (e.g. UNIX® and Microsoft® Windows®), then pay attention that the view file is transferred by means of FTP. Otherwise there is the risk of destroying the hexadecimal code for the end of the line of a data record and the file is not readable for IDEA®.

Likewise an initial (empty) date field or the full stop or comma sign for the decimal symbol and thousand symbol mean that there might be a need for discussion on further processing in subsequent systems such as IDEA® etc.

### 5.5.14.8 DISPLAY VIEW CONTENTS (TRANSACTION FTWN)

The transaction FTWN provides the display of the view log with more details of the creation date and the storage location of the view file and offers access to the view content in ALV technology. View files, which have been created with DART Version 2.3 and earlier, can unfortunately not be displayed in ALV format.<sup>133</sup>

### 5.5.15 AUTOMATION OF THE EXTRACT CREATION – OUTLOOK

If there are a large number of company codes in the company and a midyear extract creation has been selected, then the effort required to carry out the extraction process properly is not inconsiderable.

To simplify this, DART 2.6 supplies a connection to the SAP Schedule Manager (Transaction SCMA). With the SAP Schedule Manager it is possible to define process chains in the extraction process on the basis of the SAP workflow.

Here variable input parameters, such as company code, fiscal year, extraction period, name of extract etc. could be transferred dynamically. The extraction scope (by means of the selection indicator on the initial screen of transaction FTW1A) and the selection variables are specified for the aforementioned dynamic parameters in programme variants that have to be exactly defined in advance.

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<sup>133</sup> cf. SAP Note 810014 – Upgrade of DART 2.3 to DART 2.4.

Process chains can now be defined for DART in the Schedule Manager with these preparations. Such a process chain could look like this:

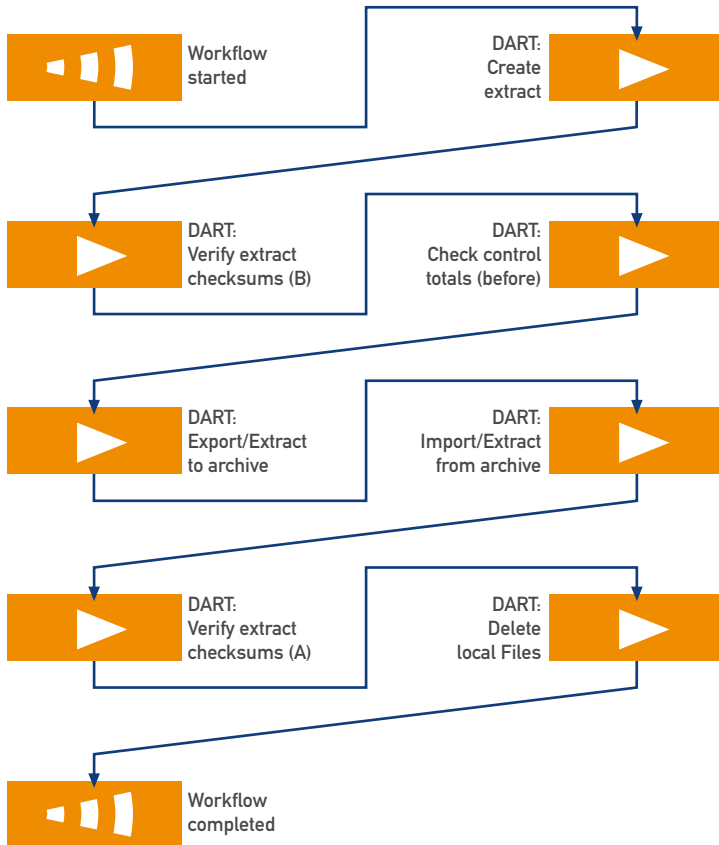


Figure 42: Possible process chain for DART extraction by means of the Schedule Manager

In the Schedule Manager, one can also specify that in case of error a specific person is informed by an express message that there is no need for action for this extract.

Process chains defined in this manner can then be scheduled in the Schedule Manager at specific times or periodically.

Additional information can be found in the SAP Notes for DART 2.6<sup>134</sup> and in the components of the SAP Schedule Manager CA-GTF-SCM-A on the SAP Service Marketplace (<http://service.sap.com/notes>).

134 cf. SAP Note 1173540 – Upgrade of DART 2.5 to DART 2.6.

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### 5.5.16 SUMMARY DART

ADVANTAGE	DISADVANTAGE
Customizing (initial setting) only requires little effort.	High maintenance effort due to continuous monitoring of SAP Notes.
Free-of-charge as part of the standard for all releases currently in maintenance.	
DART extracts can be evaluated in a SAP R/3 or ERP 5.0/6.0 system, which does not necessarily have to be identical to the source SAP system, evaluation by a system with the same or a higher release compared with the creating system.	Application only for SAP systems; for non-SAP systems another solution has to be found.
DART extracts can be evaluated in a SAP R/3 or ERP 5.0/6.0 system, which does not necessarily have to be identical to the source SAP system, evaluation by a system with the same or a higher release compared with the creating system.	Importing of special transports is time-consuming.
Data scope is continuously updated due to new findings.	
Standard starting point for all SAP users.	
Can be "frozen" with DART data in case of shutdown plans. Source system does not have to correspond to the evaluating system.	
Merger or acquisition scenarios can be mapped.	
If there is a change in the chart of accounts, all historically relevant data in already existing DART extracts can still be evaluated in their original definition.	
Extension of the data catalogue by SAP standard fields due to customer developments is possible.	
Extensions of the data catalogue by customer tax-relevant data tables are possible; refers to tables which do not originate from the SAP namespace.	
	Extract has to be carried out before external storage (SAP data archiving); subsequent updating is very time-consuming or resp. not possibly.
From DART Release 2.4 extract splitter to split extracts into individual original segments in the SAP AIS format.	
From DART Release 2.4 technical relief in the case of shutdown (DART = other system).	

Table 17: Overview of advantages and disadvantages of DART

## 5.6 SAP HUMAN CAPITAL MANAGEMENT

Payroll accounting is carried out in SAP in the Human Capital Management (HCM) module. Often the old description HR (Human Resources) is still used.

The payroll system HCM has a special position within the SAP environment with regard to the GDPdU topics. The Interface Toolbox (Transaction PU12) is available for this application. For data protection reasons and due to the normally not large quantities of data, HCM has not been integrated into the DART tool and was therefore also not the purpose of our deliberations within the WG GDPdU.

From a technical point of view, it would be appropriate to point out that the audit activities for income tax audits also always look outside the payroll accounting. Thus the fiscal authorities will check specific facts in the financial accounting, which are to be considered as benefits in kind in the payroll accounting, e.g. use of company car, gifts to employees above the value limits, staff discounts etc.

### 5.6.1 DIRECT ACCESS (Z1 ACCESS)

Even for HCM, there is an auditor role SAP\_AUDITOR\_TAX\_HR just as for FI, MM, SD etc. The transactions contained in the role also support the fiscal year-related period restriction<sup>135</sup> of the auditor authorisation<sup>136</sup> and the Action Log.<sup>137</sup> Please also take into account the additional notes on the authorisation role of the auditor on HCM data.<sup>138</sup>

In the SAP Service Marketplace service.sap.com, you can find relevant notes for HCM alongside the component wCA-GTF-GDP in component PY-DE-NT-TX.

### 5.6.2 DATA TRANSFER (Z3 ACCESS)

There has been a flexible extraction tool in SAP HCM for a long time, the Interface Toolbox (Transaction PU12). This transaction was however hardly known in Germany until the implementation of the GDPdU requirements in SAP.

A sample interface format (DA00) has been delivered by the SAP HCM Development Department. After initial feedback from income tax audits, in practice adjustments of the sample format are required in most cases.

The Interface Toolbox can export data with the aid of the XML description standard.<sup>139</sup> Please also note the information to download in batch mode<sup>140</sup> and to output text tables together with the XML file.<sup>141</sup>

<sup>135</sup> cf. Section 5.2.3.

<sup>136</sup> cf. SAP Notes 445148.

<sup>137</sup> cf. SAP Notes 529251 and 677249.

<sup>138</sup> cf. SAP Notes 662805 and 776038.

<sup>139</sup> cf. SAP Note 594048 XML Data description for data transfer.

<sup>140</sup> cf. SAP Notes 673829.

<sup>141</sup> cf. SAP Notes 673235.



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### 5.7 TRAVEL EXPENSE ACCOUNTING (FI-TV)

The travel expense accounting has an almost ambiguous position between FI and HCM in the SAP environment. It used to belong to HCM (then still HR), since SAP R/3 Release 4.0 it has been assigned to the FI module (FI-TV). Technically however FI-TV still uses many components of HCM.

If the payroll accounting and the financial accounting are operated on two separate systems, which is the case for the majority of SAP installations, then the travel expense accounting can be installed either on the HCM system or on the FI/CO system.

It makes sense to operate it on the HCM system if employees normally assign their travelling expenses to their master cost centre. If, however, travelling expenses have to be entered on different CO objects (e.g. cost centres, orders, WBS elements) (a typical scenario for service providers), then the travel expense accounting is operated mostly on the SAP FI/CO system and a part of the HR master record is replicated on the separate SAP HCM.

#### 5.7.1 Z1 ACCESS TO TRAVEL EXPENSE ACCOUNTING DATA

Depending on which system it was decided to install FI-TV, the authorisation for the Z1 access has to be set up on this system for the auditor's access and the period check has to be activated.

#### 5.7.2 DATA TRANSFER (Z3 ACCESS)

For data extraction and to create DART extract files, the DART tool was extended to Release 2.2 for the travel expense accounting.<sup>142</sup>

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<sup>142</sup> cf. SAP Notes 668943 (Delivery DART 2.2) and 692071 (Addition FI-TV for DART 2.2).



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## 6 Other technical Implementation Scenarios

### 6.1 EVALUATION SYSTEM FOR MASS CONTRACT INVOICING

The solution preferred by the WG GDPdU refers only to the standard solution not however to the SAP Business Solutions (such as e.g. IS-U for the energy industry). SAP has developed its own solution complementary to DART, amongst others, for the mass contract invoicing (FICA) used in the business solutions Energy Supply (IS-U) and Telecommunications (IS-T): a special SAP extraction process, which also permits partial quantities of data to be available to the auditor from IS-U/IS-T Release 4.7.1, similar to the view creation in DART.

Evaluation of mass contract invoicing (FI-CA) used in:

- > IS-T Telecommunication
- > IS-U Suppliers
- > FS-CD Insurances: Collection/Disbursements
- > IS-M Media (FI-CA optional for IS-M/SD)
- > IS-PS Public Sector (FI-CA optional).

### 6.2 DART ENHANCEMENTS FOR INDUSTRY SOLUTIONS

Enhancements are available for the DART data catalogue for some industries:

- > IS-M-AM Media – Advertising Management
- > IS-M-AM Media – Sales & Distribution.

### 6.3 CUSTOMIZED SOLUTIONS

Certainly there are other solutions in combination with other tools which go beyond DART. They can however only be used in customized project work.

If, from an economical point of view, there is an absolute necessity to carry out e.g. data vaulting from SAP several times during the year, then such systems could be integrated into the GDPdU solution. To implement the GDPdU requests, it is not obligatory to purchase these additional systems/processes which are subject to charge.

## 7 Outlook

Even after seven years of discussions in written papers, with the fiscal authorities and the taxpayers, there are still additional important matters which have not yet been finally clarified. The multitude of ERP systems which often have a wide scope of functions are and will still remain a great challenge for the auditors, the fiscal authorities in general and the taxpayers. Depending on the perspective of an auditor or a taxpayer, pragmatic solutions related to the relevant company situation will always provide new issues to discuss.

From the experience we have gained in audits up to now, we have recognised that ERP systems which have a wide scope of functions such as a SAP system are creating data in complex processes; the handling of this data in the systems is not or not primarily geared to the data access on tax-relevant data. If data is transferred as a download via temporary interim databases outside the ERP systems and is combined again at a later date to make a uniform picture for an audit, there are a large number of interdependencies and dependencies. This complexity of the interaction of data from different sources has to be mastered by the taxpayer and the auditor, so as to get consistent results quickly in auditing situations. Auditors and taxpayers come up against limits, which are imposed by the system again and again, if they need to trace past data combinations back to all the historical ramifications.

Not only the scope of the functions of the ERP systems is growing, also the cognitive process of the fiscal authorities and the taxpayer with regard to the ultimately endless options of IT. The question of proportionality of measures has been asked again and again and will also continue to be a central topic.

The SAP functions, which are already very comprehensive, will be further developed. Again and again problems come to light, which were not previously known and which are not optimally solved with the currently existing functions. The WG GDPdU is aware of the challenge, which is why it actively participates in the progress of the GDPdU solutions. We hope that the knowledge gained in the practical audit will provide an impetus so that ultimately the legislator and the fiscal authorities will modify their statements and instructions for computer-aided audits in favour of pragmatic practical solutions.

Representatives of the fiscal authorities are pointing out again and again that the documentation of the procedures and processes used at the taxpayer has a great significance for preparing and carrying out an audit with data access. In the German Federal States, there are different forms for the implemented procedures and the existing documentation, which are transmitted with the audit ruling to the taxpaying company. In practice it turns out again and again that such documentation does not exist in the company or is inadequate and/or not up-to-date. We urgently point out that the documentation of the procedures and processes has been obligatory since 1995 due to the GoBS. In addition, new regulations have appeared in the last years with KonTraG (Corporate Sector Supervision and Transparency Act), Basel II, Sarbanes Oxley Act and IKS (Internal Control Systems), which are similar to the GoBS documentation. Each taxpayer has to expect that in future in the case of audits pursuant to §193 AO they will particularly be asked for the GoBS documentation.



# 8 Annex

## 8.1 LITERATURE LIST

(the list is not exhaustive)

### MICHAEL BAUM

Principles of Data Access and Auditing of Digital Documents (GDPdU),  
NWB 2002, Page 7641-7648.

### BITKOM

Guidelines on electronic data access by the fiscal authorities  
Tax requirements and technologies on data storage, as of:  
June 2003.

### PRÄSIDIUM DER BUNDESSTEUERBERATERKAMMER

(STEERING COMMITTEE OF THE GERMAN FEDERAL CHAMBER OF TAX CONSULTANTS)  
Recommendations of the German Federal Chamber of Tax Consultants on the attitude towards  
computer-aided government tax audits,  
DStR, Insert to issue dated 18.01.2002

### CLAUS DALINGHAUS

Digital government tax audit for SAP® and R/3® accounting systems,  
StB 2003, Issue No. 4, Page 141-149.

### DR. XAVER DITZ

Scope of the digital data access by the fiscal authorities in national and international corporations,  
DStR 2004, Page 2038-2042.

### STEFAN GROSS, DR. ULRICH KAMPFFMEYER, PHILIPP MATHEIS

Preparations for the digital audit – Possible solution,  
BB 2004, Page 1083-1087.

### STEFAN GROSS, PHILIPP MATHEIS, BERNHARD LINDGENS

Provision for the costs of data access by the fiscal authorities,  
DStR 2003, Page 921-927.

### STEFAN GROSS

Adjustments on the company's computer system to comply with provisions of data access by the fiscal  
authorities,  
DStR 2002, Page 1121-1125.

### ANDREAS HAGENKÖTTER, DIRK-MICHAEL MÜLOT

The digital tax audit  
New forms of data access by the fiscal authorities from 1st January 2002,  
DIHK Berlin, September 2002.

### BERND HENTSCHEL (HRSG.)

Digital government tax audit,  
data access by the fiscal authorities.

1<sup>st</sup> edition 2002.  
2<sup>nd</sup> revised edition 2004.  
DATAKONTEXT Fachverlag, Frechen.

#### **JENS INTEMANN, THILO CÖSTER**

Rights and obligations for digital auditing – At the same time discussion of the so-called BMF FAQ catalogue.  
DStR, 2004, Page 1981–1985.

#### **JENS INTEMANN**

The audit in the digital age: The new rights of the fiscal authorities to digital data access.  
NWB, Compartment 17, Page 2007–2018.

#### **DR. ULRICH KAMPPFMEYER, BERNHARD ZÖLLER**

The GDPdU and its requirements on electronic archiving, joint statement.  
Hamburg/Sulzbach i. Ts., April 2003.

#### **DIETER KEMPF**

Digital auditing: The “burying-your-head-in-the-sand” policy won’t help at all.  
BB, 58. Vol., Issue No. 12, 19.03.2003, Page I.

#### **CHRISTOPH KROMER**

StSenkG (Tax Reduction Act): Changes in the AO on data access by the fiscal authorities within the scope of audits.  
DB 2001, Page 67–69.

#### **CHRISTOPH KROMER**

Data access by the fiscal authorities on the IT systems of the company from 2002: Scope and possible solutions.  
DStR 2001, Page 1017 ff.

#### **DR. OTTO-FERDINAND GRAF KERSSENBRÖCK, OLAF RIEDEL, DR. GÜNTHER STRUNK**

On the constitutionality of the data access by the fiscal authorities within the scope of government tax audits in acc. with §147 Sect. 6 AO.  
BB 2002, Insert No. 9, Issue No. 49.

#### **RAINER KUHSEL, DR. CHRISTIAN KAESER**

Comments on the BMF statement regarding data access by the fiscal authorities from 1.1.2002.  
DB 2001, Page 1583–1585.

#### **DR. HARALD SCHAUMBURG**

Data access and other control options of the fiscal authorities.  
DStR 2002, Page 829–838.



## 8 Annex

### DR. JENS SCHMITTMANN

“The transparent taxpayer?” – Comments on the BMF principles of data access and auditing of digital documents.

WPg 2001, Page 1050–1057.

### SCHMITZ, STEPHAN

Doubt in connection with the access rights of the fiscal authorities to computer-aided accounting systems. STBP 2002, Part I: Issue No. 7, Part II: Issue No. 8, Part III: Issue No. 9.

### DR. TOBIAS TAETZNER, THOMAS BÜSSOW

Principles of data access and auditing of digital documents – Quo vadis?

BB 2002, Page 69–73.

### VERBAND ORGANISATIONS- UND INFORMATIONSSYSTEME E.V. (VOI) (HRSG.)

(Association of organisational and information systems)

Guidelines to carry out a project to meet the requirements of the principles of data access and auditing of digital documents

Version 1.0 dated November 2003.

[http://www.elektronische-steuerpruefung.de/checklist/voi\\_leitf.pdf](http://www.elektronische-steuerpruefung.de/checklist/voi_leitf.pdf).

## 8.2 SAP NOTES

(the list is not exhaustive)

Below are some prominent SAP Notes on the GDPdU context with additional cross-references listed in the notes.

### GENERAL:

582583 Update of GDPdU – DSAG application procedure

### AUTHORISATIONS:

115224 SAP Audit Log  
451960 Authorisation roles for auditors  
445148 Extended period check  
788313 Installation description of the authorisations in customer developments related to the fiscal year  
798565 Programmes with fiscal year audit  
830736 Update auditor role  
925217 GDPdU: Access to RFUMSV00 by tax auditor  
935189 Extensions of authorisation roles SAP\_AUDITOR\_TAX.  
1058866 DART authorisations on extracts

### DART-VERSIONS:

622095 Upgrade from DART 2.0 to DART 2.1  
688943 Upgrade von DART 2.1 auf DART 2.2  
702511 Upgrade von DART 2.2 auf DART 2.3 (= 5.00)

763867	Upgrade from DART 2.2 to DART 2.3 (<= 4.70)
810014	Upgrade from DART 2.3 to DART 2.4
1050841, 1093942	Upgrade from DART 2.4 to DART 2.5
1173540	Upgrade from DART 2.5 to DART 2.6

#### DATA EXTRACTION:

483425,879680	DART and material valuation
1015284, 1039600	Material valuation: Restrict selection to period
1029630, 1092942	FTWE / FTWE1: Minus sign incorrectly displayed
896894, 992803,	
1012235, 1225592	Performance optimisation

#### VIEW CREATION:

663077	SAP Audit Format
921487, 926048,	Due to format error, view files cannot
1045695, 1070572	be imported into IDEA®
945615	DART standard views
1045695	DART date conversion in view export
1056005	Authorisation group for view files
1070572	Do not export Colour Setting column
1141016	Join conditions always "outer join"

#### INTERNATIONAL CONTEXT:

450166, 546853	International orientation (Austria)
1082823, 1173730	International orientation (Portugal)

#### SONSTIGES:

1012531	GDPdU in SAP Business One
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Further information is available on the Service Marketplace of SAP AG ([service.sap.com/notes](http://service.sap.com/notes)) under the search term of the components

- > DART: CA-GTF-DRT
- > Authorisations GDPdU: CA-GTF-GDP and
- > Authorisations HCM GDPdU: PY-DE-NT-TX

## 8.3 LINKS

(the list is not exhaustive)

#### SAP AG

[www.sap.de](http://www.sap.de)



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## 8 Annex

### SAP SERVICE MARKETPLACE

GDPdU information with additional notes

- > <http://service.sap.com>
- > <http://service.sap.com/dart> Data Retention Tool
- > <http://service.sap.com/gdpdu> Steuersenkungsgesetz (Tax Reduction Act)
- > <http://service.sap.com/ais> Audit Information System
- > <http://service.sap.com/ilm> Information Lifecycle Management; amongst others SAP Data Archiving

### GDPDU – DEUTSCHE SAP-ANWENDERGRUPPE E. V. (DSAG)

...amongst others results of a DSAG Work Group, which deals with the effects of the law on the SAP processes.

<http://www.dsag.de/>

Direct access to the pages of the WG GDPdU:

<http://www.dsag.de/ag/gdpdu>

### A COLLECTION OF VARIOUS INFORMATION ON THE GDPDU

A comprehensive collection of source material and the basis for addition information for solutions and services regarding electronic tax auditing in accordance with the GDPdU

<http://www.elektronische-steuerpruefung.de>

BMF: BMF Statement: Principles of data access and auditing of digital documents (GDPdU)

BMF Statement dated 16.07.01 – IV D 2 – S 0316 – 0136 / 01 –

[http://www.bundesfinanzministerium.de/nn\\_58004/DE/BMF\\_Startseite/Aktuelles/BMF\\_Schreiben/Veroeffentlichungen\\_zu\\_Steuerarten/abgabenordnung/006.html](http://www.bundesfinanzministerium.de/nn_58004/DE/BMF_Startseite/Aktuelles/BMF_Schreiben/Veroeffentlichungen_zu_Steuerarten/abgabenordnung/006.html)

### BMF: FAQ CATALOGUE

respective current status, presently 01.02.2005

[http://www.bundesfinanzministerium.de/nn\\_53848/DE/BMF\\_Startseite/Service/Downloads/Abt\\_IV/009.property=publicationFile.pdf](http://www.bundesfinanzministerium.de/nn_53848/DE/BMF_Startseite/Service/Downloads/Abt_IV/009.property=publicationFile.pdf)

### BMF INFORMATION ON DESCRIPTION STANDARD

Notification dated 15.08.2002, Ref.: IV D 2.

[http://www.bundesfinanzministerium.de/nn\\_53848/DE/BMF\\_Startseite/Service/Downloads/Abt\\_IV/010.property=publicationFile.pdf](http://www.bundesfinanzministerium.de/nn_53848/DE/BMF_Startseite/Service/Downloads/Abt_IV/010.property=publicationFile.pdf)

### GDPDU PORTAL | HOMEPAGE | THE PORTAL FOR THE DIGITAL ...

... electronic tax audit in accordance with the provisions of the fiscal authorities for digital access to tax-relevant data of the company GDPdU. ...

[www.gdpdu-portal.com](http://www.gdpdu-portal.com)

### GDPDU INFORMATION FROM AUDICON

[www.audicon.net](http://www.audicon.net)

[www.gdpdu.com](http://www.gdpdu.com)

## GDPDU – CURRENT STATUS OF THE CHANGES IN THE GERMAN FISCAL CODE

GDPdU – current status of the changes in the German Fiscal Code, information on different subjects, AVV efficiency in the administration of economy and ...  
[www.awv-net.de](http://www.awv-net.de). Keyword: GDPdU.

## GDPDU – ZVEI COMMENT ON THE BMF FAQ DATED 15.01.2007

<http://www.zvei.de/index.php?id=1452&0=>

## INFORMATION ON CUSTOMS AUDITS

<http://www.zoll.de/index.html>. Stichwort: Außenprüfung.

## 8.4 BMF STATEMENT AND DECREES, OFD DECREES AND FINANCE COURT RESOLUTIONS

(the list is not exhaustive)

### BUNDESMINISTER DER FINANZEN (BMF) (FEDERAL FINANCE MINISTER)

Generally accepted principles of computer-assisted accounting systems (GoBS)

BMF Statement dated 7<sup>th</sup> November 1995. Ref.: IV A 8 – S 0316 – 52/95,  
BStBl. 1995, Part I, Page 738 ff.

### Principles of data access and auditing of digital documents (GDPdU)

BMF Statement dated 16.07.2001 – IV D 2 – S 0316 – 0136/01,  
BStBl. I 2001, Page 415 ff.

[http://www.bundesfinanzministerium.de/nn\\_58004/DE/BMF\\_Startseite/Aktuelles/BMF\\_Schreiben/Veroffentlichungen\\_zu\\_Steuerarten/abgabenordnung/006.html](http://www.bundesfinanzministerium.de/nn_58004/DE/BMF_Startseite/Aktuelles/BMF_Schreiben/Veroffentlichungen_zu_Steuerarten/abgabenordnung/006.html)

### Principles of data access and auditing of digital documents for the area of responsibility of the customs authorities (GDPdUZ)

BMF Decree dated 28.11.2007. Ref.: III A 3 – S 1445/06/0029,  
<http://www.elektronische-steuerpruefung.de/rechtsgrund/gdpdusz.pdf>.

### FISCAL AUTHORITY INSTRUCTIONS

#### Accounting and archiving systems

OFD Düsseldorf, Decree dated 22.02.2002. Ref.: S-0316 – St 421,  
DB 2002. Page 610.

#### Printout and storage of an electronic bank statement in the online banking procedure

OFD Munich, Decree dated 06.08.2004. Ref.: S-0317 – 34 St 324,  
BB 2004, Page 2349.

#### Accounting data in the area of application of the German Fiscal Code for existing identical

OFD Decrees Munich/Nuremberg dated 23.12.2002.

Ref. Munich: S-0315 – 17 St 312, Ref. Nuremberg: S-0315 – 8 St 24.



## 8 Annex

### FINANCE COURT JURISDICTION – SUPREME TAX COURT (BFH) AND FINANCE COURT (FG)

Creating a provision for documents which have to be stored

BFH Judgement dated 19.08.2002,

BStBl. 2003, Part II, Page 131; DStR 2002, Page 2030 ff.

Access by the fiscal authorities on computer-aided accounting

BFH Resolution dated 26.09.2007, I B 53,54/07.

BFH/NV 2008, Page 133

Financial Court of Lower Instance, Düsseldorf:

From the posting to the document (direct access to archives connected to accounting – DMS, optical archive)

Resolution dated 05.02.2007, 16 V 3454/06, not legally binding.

EFG 2007, Page 892.

Tax relevance versus tax impact

Resolution dated 05.02.2007, 16 V 3457/06 A, not legally binding.

EFG 2007, Page 890.

Presentation of cost centre accounting and cost centre directories

Finance Court Münster, Judgement dated 22.08.2000, 6K 2712/00 AO, legally binding.

EFG 2001, Page 4.

Refutation of the correctness of the cash management system by the Chi-Test

Finance Court Münster, Resolution dated 10.11.2003, Ref.: 6 V 4562 / 03 E.U, legally binding.

Datev Lexinform DocNo. 0816472.

Data access in acc. with §147 Sect. 6 AO (Data access ruling in the form of data media transfer)

Financial Court Rhineland-Palatinate, Judgement dated 20.01.05, 4 K2167/04, legally binding.

EFG 2005, Page 667.

Legitimacy of a request for data media transfer as well as the taxpayer's right to have the auditor sign a confirmation (Confirmation of prudence)

Finance Court Thuringia, Resolution dated 20.04.2005, 3-46/05, legally binding.

EFG 2005, Page 1406.

Tax relevance of cost centres

Financial Court Rhineland-Palatinate, Judgement dated 13.06.06, 1 K 1743/05, legally binding.

EFG 2006, Page 1634.

Voluntary recordings as well as allowing the data medium to leave the taxpayer's scope of protection

Finance Court Hamburg, Judgment dated 13.11.2006, 2 K 198/05, not legally binding.

Datev Lexinform DocNo. 5003811.

**Data access to so-called preliminary procedures in Financial Accounting (electronic cash register)**  
Finance Court Sachsen, Resolution dated 24.11.2006, legally binding

**Release of documents for special sales/purchases tax audit at the client (Relationship client/tax consultant within the scope of data access)**  
Finance Court Berlin-Brandenburg, Judgment dated 13.04.2007, 6 K 2012/06 B, not legally binding,  
Datev Lexinform DocNo. 5005222.

**Duty to present a wage archive CD within the scope of the employment tax audit**  
Finance Court Baden-Württemberg, Judgement dated 11.05.2007, 9 K 178/06, legally binding,

**Ruling for data media transfer within the scope of the employment tax audit**  
Finance Court Münster, Judgment 16.05.2008, 6 K 879/07, legally binding.

## 8.5 GLOSSAR

(the list is not exhaustive)

NAME	MEANING
ABAP	Programming language for SAP R/3 or SAP ERP 5.0/6.0
ACL	Analysis programme; scope of functions comparable with the auditing programme IDEA; used e.g. by the fiscal authorities in Austria
ALV	Advanced List Viewer
A0	German Fiscal Code
Archiving systems	Data storage systems, not accounting systems, filing systems. If data can no longer be evaluated in the source system → Tax relevance
ASUG	Americas' SAP Users' Group; Association of SAP clients in the USA
Audit	Generic description for employment tax audit, special audit on sales/purchases tax, government tax audit (income taxes) and customs audit
AWV	Arbeitsgemeinschaft für wirtschaftliche Verwaltung e. V., Eschborn (Working Group for Economic Administration)
BB	Magazine Management consultants
BDI	Bundesverband der Deutschen Industrie e. V. (Federation of German Industries)



## 8 Annex

NAME	MEANING
BDSG	Bundesdatenschutzgesetz – German Federal Data Protection Act
BGBI.	Bundesgesetzblatt = German Federal Law Gazette
BMF	Bundesministerium der Finanzen = German Federal Finance Ministry
BMF-FAQ	Catalogue on frequently asked questions issued by BMS under <a href="http://www.bundesfinanzministerium.de">www.bundesfinanzministerium.de</a> , search term “GDPdU”
Business Data Warehouse	See Data Warehouse
Business letter	Comprises all non-verbal messages of the businessman with regards to business matters directed externally
Byte Megabyte/ Gigabyte/ Terabyte	Unit of measurement for the capacity of a data storage unit MB: 1.048.576 bytes GB: 1.024 megabytes TB: one trillion bytes or 1.024 GB
Canned Data	File, which was created at a specified time and has not been further processed/changed
CO	SAP Module Controlling Cost accounting by means of cost elements, cost centres and orders as cost collectors; amongst others profit centre accounting
COM	Computer Output on Microfiche
Commercial letter	Document, which refers to a commercial transaction
Data Warehouse	Structured collection of business-related data for evaluation with special evaluation options
Data transfer (Z3)	Data on a data medium is provided to the end user
Document	Evidence, basis for a posting in paper form. It can also be electronically created posting transactions (documents/lines)
Download	Downloading data or programs from a system onto another medium
DART	Data Retention Tool SAP AG solution for Z3 access
Data compression	Aggregation of data without loss of data contents, the purpose is to reduce the file size
Data aggregation	Summary of individual data on a new date, from which the individual data is no longer evident
DB	Magazine: The Company
Digitally created data	generated by an automatic operation in a computer system, automatically gets from one computer system into another computer system
DMS	Document Management System

NAME	MEANING
DSAG	Deutschsprachige SAP Anwendergruppe e. V., Walldorf, German-Speaking SAP User Group, founded in 1995
DSB	Data Protection Officer
DStR	Magazine: German Tax Law
DV	Data processing (Synonym: EDP)
EDI	Electronic Data Interchange, data interchange of structured data which allows further processing by the recipient automatically
EDP	Electronic data processing (Synonym: DP)
ERP-System	Enterprise Resource Planning, electronic management of inventory management, production planning and production control as well as financial accounting in a company with the aim to plan the business operations as efficiently as possible by means of complex software
FAQ	Frequently asked questions: Catalogue of frequently asked questions
FI	SAP Module Finance Financial accounting including the subledgers Customers/Vendors and Asset Management as well as Travel Expense Accounting
FI-AA	Asset Management, SAP module for asset accounting
FiBu	Financial Accounting
Flat File	One-dimensional (mostly sequential) file
FTP	File Transfer Protocol
GDPdU	Principles of data access and auditing of digital documents: BMF Statement dated 16.07.2001
GG	Grundgesetz = German Basic Law
GAAP	Generally accepted accounting principles
GoBS	Generally accepted principles of computer-assisted accounting systems
P & L	Profit and Loss Statement: synonym: P/L
HCM	Human Capital Management, Human resources management; was called HR Module before renaming.
HOST	Mainframe
HR	Human Resources, Human resources management; new name: Human Capital Management (HCM)



## 8 Annex

NAME	MEANING
IAS/IFRS	Formerly: International Accounting Standards, New: International Financial Reporting Standards Accounting principles in accordance with the "true and fair" view (Shareholder Principle)
IDEA	Analysis programme used by the fiscal authorities, sold by Audicon GmbH, Düsseldorf/Stuttgart
IDOC	Abbreviation for Intermediate Document; proprietary SAP standard format to exchange data between systems/processes
IDW	Institut der Wirtschaftsprüfer in Deutschland e. V. (Institute of Auditors in Germany)
IKS	Internal Control System; Entirety of all coordinated and interconnected control measures and regulations to secure assets, to secure correct records and implementation of the corporate policy objectives
Indirect Data Access (Z2)	Evaluation of data not by the auditor himself/herself, but by the taxpayer's employee in accordance with his/her specifications
„inner join“	Form of joining data tables: Only those data records are provided as a result, where all the join conditions of the tables involved are fulfilled
IT	Information Technology, in many cases also used as a department name, Synonym: Data processing
Migration	Transferring data from one system to a subsequent system. Tools for the transfer and implementation are mostly provided by the software supplier. See also Shutdown Plan
MM	SAP Module Material Management; Processing of all material management processes
MS-Access	Database programme supplied by Microsoft
MS-EXCEL®	Spreadsheet programme supplied by Microsoft
MS-WORD®	Text processing programme supplied by Microsoft
Outer Join	Form of joining data tables: Only those data records, where the join conditions are in one of the tables involved, are provided as a result
pdf	Portable Document Format; file format supplied by software manufacturer Adobe can be read by free-of-charge programmes without licenses, but can only be processed with the full Adobe version

NAME	MEANING
Query	Term from database queries
Relational Database	Logical database; administrates data in the form of related tables for optimal access
Remote enquiry	Data access to external systems at different locations
Reorganisation	Reorganisation by external storage of data from the database to improve the performance of the database or the system
Procedure/Computer Procedure	Summary of automatically executed processing steps
Progressive Auditing	Starts with the document, then goes from the basic records to the accounts and then onto the balance sheet/profit & loss statement or tax registration/tax return
Retrograde Auditing	Reverse procedure to that of progressive auditing (see above)
Report	Evaluation of data
SAP	Software manufacturer SAP AG, Walldorf; amongst others supplier of the products SAP R/3, SAP ERP
Interface	Data transfer between two systems
SD	SAP Module Sales and Distribution; Processing of all matters in sales and distribution
Spool File	Print list in file format, which is automatically generated for a print request
Stand Alone	A computer system without computer interfaces to other processing systems
STBP	Magazine: The tax audit
Shutdown Plan	Definition of a course of action to deactivate computer systems
Summary of fixed assets	Development of the fixed assets, how they developed during the fiscal year: Portfolio at the start; changes due to acquisitions, retirements etc; portfolio at the end
Support Package	Programme package to extend an existing programme system, mostly provided on a periodic basis to rectify errors
System Trace	Listing/tracing processing steps or user inputs (e.g. Queries/ Postings) in a computer system. Can be used for error analysis or for logging
Task Force	Rapid deployment force for special cases
Transaction Code	Identifier to call a processing sequence (Programme, Report ...) in a computer system, depending on user rights
Direct Data Access (Z1)	Direct access to data by the user by means of online entries



## 8 Annex

NAME	MEANING
USB Port	Universal Serial Bus, serial bus system developed by INTEL/ Microsoft to join peripheral devices such as e.g. printer, burner, mouse, digital camera, external data storage units etc.
USt	Sales/Purchases tax
UStId	VAT registration number
Links	Connection between data fields from one or several tables throughout process structures or of data throughout several software applications
View	(Predefined) view on a database/table; within the scope of the SAP DART tool: File resulting from the evaluation of data extracts
XBRL	Extended Business Relationship Language
XML	Extensible Markup Language; Description language in a simple, very flexible text format, which is to a large extent device-independent
Z1: Direct Data Access	Type of access 1: Direct access to data by the user by means of online entries
Z2: Indirect Data Access	Type of access 2: Access to data by a representative of the end user
Z3: Data Transfer	Type of access 3: Data on a data medium is provided to the end user
ZVEI	Zentralverband Elektrotechnik- und Elektronikindustrie e. V., Frankfurt (Central Association of Electrical Engineering and Electronic Industry)

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