DSAG (GERMAN-SPEAKING SAP USER GROUP)
RECOMMENDATION FOR ACTION
RECOMMENDATIONS ON THE IMPLEMENTATION
OF DATA ACCESS (GOBD/GDPDU)
BY THE FISCAL AUTHORITIES
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SIG Taxes
WG Data Access (GoBD/GDPdU)

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# CHANGE HISTORY

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Table 1: Change History
1. PREAMBLE

DSAG e. V. (German-Speaking SAP User Group), Special Interest Group Taxes ¹, Work Group Data Access (GoBD/GDPdU) ² were constituted in September 2001 (then WG GDPdU in SIG Financials) to develop, in close cooperation with the development departments of SAP SE, solutions for the implementation of the legal requirements of data access.

Having first released recommendations on this subject in May 2002, and after further releases in May 2006 and August 2008 (last updated in January 2010), the WG ³ now presents the fourth version of the recommendations on the implementation of data access by the fiscal authorities ⁴.

Compared with previous versions, we have renamed the recommendations based on the release of the German Federal Ministry of Finance ("BMF") statement dated November 14, 2014 – "Rules concerning the orderly management and storage of books, records and documents in electronic form and data access (GoBD)" ⁵ – and have sought to address the content of said statement in this documentation.

This document also describes the significantly expanded scope of the SAP solution for data access. It is no longer solely confined to the core of SAP Business Suite, but also includes the solutions contained in SAP industry solutions and the products SAP Business ByDesign and SAP Business One. This is due to the fact that WG Data Access is now assigned in a cross-divisional role to SIG Taxes and is no longer part of SIG Financials.

This work is also the result of analyses from experts in the IT, tax, finance, and audit departments of various member companies.

It should be noted at this point that the recommendations on the data access rights of the fiscal authorities refer only to paragraphs (para.) of the GoBD statement which are

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¹ Abbreviated hereafter as "SIG Taxes".
² Abbreviated hereafter as "WG Data Access".
⁴ Formerly "Recommendations for applying the GDPdU" (German principles of data access and auditing of digital documents).
directly connected to said statement 6 or are to be considered in advance for the purpose of data access implementation (for example, regarding the immutability of data 7 and procedural documentation 8).

Provisions which directly concern the orderly management of accounts, records and documents are not the subject of these recommendations 9 concerning records of business transactions in chronological order and in objective order, (journal)-records, or journal and account functions, for example 10.

It should be noted at this point that, in contrast to the GoBS 9, the fiscal authorities also apply the GoBD fully to taxpayers who determine their profit by means of the net income method 11. The special issue of "cash-based accounting" is not discussed further in these recommendations.

The current status of the functional scope of SAP Business Suite is annotated in detail and explained for practical use. For the products SAP Business One (Chapter 5.11) and SAP Business ByDesign (Chapter 5.12), we have compiled the available information in the relevant sections. The practical recommendations with respect to SAP functions within the meaning of Chapter 4 refer to SAP Business Suite.

WG Data Access has practical experience with digital access in the context of external audits in different German federal states. Many suggestions from DSAG member companies and other companies that use SAP software have been incorporated. We also received information from the ranks of the fiscal authorities, which was incorporated into the solution.

The objective of our documentation is to offer advice "from members for members" on how to cope with the challenges of digital data access in practice. WG Data Access would like to sensitize all SAP users in general (and its members in particular) to the topic of data access.

Our information is intended to enable readers to review their company's specific implementation in SAP systems and in any upstream and/or downstream IT systems. Even though many have likely carried out a data access implementation project within the past several years, new challenges in data access arise every day, so one should

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7 para. 58 ff. of GoBD, loc. cit.
8 para. 151 ff. of GoBD, loc. cit.
9 Previously the BMF statement dated November 7, 1995, "Generally accepted principles of computer-assisted accounting systems (GoBS)", Ref. IV A 8 – S 0316 – 52/95, BStBl. (Federal Tax Gazette) 1995 I p. 738.
10 para. 82 ff. of GoBD, loc. cit.
11 "Cash-based accounting" within the meaning of Section 4, para. 3 of the German Income Tax Act ("EStG").
not consider this matter closed. Indeed, basic compliance with GoBD requirements involves continuous updates following changes in organizational structures/business processes/competences and/or IT systems.

SAP offers a multi-day workshop (name of course: WDE680 – Implementing Data Access in SAP Systems (GoBD/GDPdU)). It is geared toward employees in accounting and tax departments, as well as at system administrators and other departments which are involved in the data access of fiscal authorities at their companies in the context of external audits.

Our recommendations are also based primarily on experience in direct discussions with the fiscal authorities. This includes our participation in association hearings and expert discussions with representatives of the BMF/state fiscal authorities, trade associations, and professional chambers prior to the publication of the new GoBD; regular consultations between SAP SE, the WG SAP Experts in financial management under the leadership of the German Federal Central Tax Office ("BZSt"), and DSAG; and experience with the standard functional scope of SAP Business Suite.

Systems of SAP Business Suite such as:

- APO  SAP Advanced Planning and Optimization
- SEM  SAP Strategic Enterprise Management
- CRM  SAP Customer Relationship Management
- SRM  SAP Supplier Relationship Management
- BI/BO  SAP Business Intelligence / SAP Business Objects
- PLM  SAP Product Lifecycle Management
- And others ...

... are not considered in these recommendations.

Many SAP systems have been customized in practice and upgraded with additional functions by third parties, or enhanced with troubleshooting solutions developed by companies themselves. The resulting consequences for the authorization concept for auditor access and for technical means of transferring data media are also not the

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12 In the member’s area of WG Data Access, you will find detailed information on this topic at:
- https://www.dsag.de/arbeitsgremien/ag-gdpdu/details

13 German Federal Central Tax Office (Bundeszentralamt für Steuern), http://www.bzst.de.
subject of our documentation. We focus instead on providing information on the options available in the standard SAP system for the auditor role SAP_AUDITOR_TAX_* and for DART in order to include company-specific changes in a given database in the transfer of data media.

These recommendations have been carefully researched and developed by WG Data Access. Nevertheless, neither DSAG e.V. nor the members of WG Data Access who participated in creating this documentation shall assume liability for the accuracy of its contents or for the acceptance of DSAG’s recommendations by the fiscal authorities. Any and all 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 related problems. Any tax consulting required, must be obtained either internally or externally by each individual company.

Please let us know if you ever consider improvements necessary in this context or can report on your own practical experience during external audits, be it positive or negative. For our contact address, please refer to the information on the spokesperson and the deputy of WG Data Access at www.dsag.de.

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

Henning Burlein  Rainer Böhle  Rolf Andres
Spokespeople team of Work Group Data Access (GoBD/GDPdU), part of SIG Taxes at DSAG e. V.
2. INTRODUCTION

Since January 1, 2002, the fiscal authorities have had the right to access taxpayers’ IT systems in the context of external tax audits in order to electronically check their computerized accounting records according to Section 147, para. 6 of the German Fiscal Code ("AO")\(^{15}\) The powers of the fiscal authorities, which are very broad in terms of data access and not always precise enough in relation to IT boundaries, are now outlined further in a new BMF statement on GoBD\(^{17}\) (which is binding for said authorities).

The implementation of data access, which external auditors can choose to obtain in the form of:

- Direct access (Z1)\(^{18}\)
- Indirect access (Z2)
- Data transfer on data media that supports automated analysis (Z3)

...is associated with a number of critical operational issues whose resolution requires a significant amount of effort on the part of companies.

In this documentation, "electronic documents" is a collective term that includes:

- Data
- Data records
- Electronic documents
- And other related electronic materials.

Data access involves the obligation of taxpayers to use appropriate hardware and software to retain incoming electronic or generated electronic documents in their IT systems (insofar as they are of importance for taxation) in an immediately readable form compatible with automated evaluation\(^{19}\).

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\(^{16}\) Formerly the BMF statement on GDPdU, loc. cit.
\(^{17}\) BMF statement on GoBD, loc. cit.
\(^{18}\) "Z" stands for type of access.
\(^{19}\) Cf. Section 147, para. 6 in conjunction with Section 2, no. 2 of AO.
Here, it is necessary as always to observe the six- or 10-year retention obligation according to Section 257, para. 1 of the German Commercial Code (“HGB”) and Section 147, para. 1 in conjunction with 3 of AO while taking auditing acceptability into account.

Particularly in view of hardware and software changes in day-to-day operations, retaining electronic documents received or generated in their IT systems (insofar as they are of importance for taxation) in a form that is constantly readable and compatible with automated evaluation is likely to pose major problems for taxpayers.

The data access rights of the fiscal authorities has since been clarified and specified by a number of decisions of the fiscal courts as a supplement to GDPdU/GoBD. The BFH decision dated September 26, 2007 is an example in which the judge commented on the tax relevance of all of a given company’s financial accounts and on the access to scanned posting documents which were originally in paper form.

After more than 15 years of legally binding legislation, the fiscal authorities are actively using data access. As far as we are aware, the external auditors use both the auditing software IDEA® and direct access to IT systems; here, the focus is no longer solely on electronic documents (pertaining to financial accounting, for example), as access to feeder systems and ancillary systems is also increasing.

It should be noted that the external auditors normally require companies to provide electronic documents through access types Z1, Z2 and/or Z3. The approach followed by the fiscal authorities is different from one federal state to another. The fiscal authorities have recognized that their external auditors need instruction not only on the auditing software in question, but intensive training in SAP software and its functions, as well.

Some federal states have established or are establishing positions for special IT auditors to support their external auditors, while other states are working toward requiring external auditors to acquire their own data access knowledge.

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20 Cf. overview of fiscal court decisions (orders/judgments) in Chapter 7.4.
22 Manufacturer: CaseWare International Inc., Toronto, Canada; sales in Germany through Audicon GmbH, Düsseldorf/Stuttgart.
3. LEGAL FRAMEWORK

3.1 LEGAL REGULATIONS ON DATA ACCESS RIGHTS

3.1.1 OVERVIEW

Data access rights are enshrined in the AO and have been in force since January 1, 2002. Among other legislation, the German Value Added Tax Act (VATA) stipulates rules on accessing electronic invoices.

The following table provides an overview of the essential legal bases:

<table>
<thead>
<tr>
<th>Legal Basis</th>
<th>Brief Overview</th>
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<tbody>
<tr>
<td>Sect. 146 (5), Sentence 2, AO.</td>
<td>Regulatory Provisions for Accounting and Records</td>
</tr>
<tr>
<td></td>
<td>When managing accounts and other necessary records on data media, it is necessary to ensure in</td>
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<td></td>
<td>particular that the data is available and immediately readable at all times during the</td>
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<tr>
<td></td>
<td>retention period.</td>
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<tr>
<td></td>
<td>According to sentence 3, this also applies to the data access rights of fiscal authorities.</td>
</tr>
<tr>
<td>Sect. 146 (5), Sentence 3, AO.</td>
<td></td>
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<tr>
<td>Sect. 147 (2), no. 2, AO.</td>
<td>Regulatory Provision for the Retention of Documents</td>
</tr>
<tr>
<td></td>
<td>If the documents subject to retention within the meaning of Section 147, para. 1 of AO are</td>
</tr>
<tr>
<td></td>
<td>retained on a data medium, the data must be available for immediate reading and automated</td>
</tr>
<tr>
<td></td>
<td>evaluation at all times during the retention period.</td>
</tr>
<tr>
<td>Sect. 147 (5), AO</td>
<td>Tools are to be provided to make documents on data media immediately readable.</td>
</tr>
<tr>
<td></td>
<td>The taxpayer bears the costs associated with data access.</td>
</tr>
<tr>
<td>Sect. 147 (6), AO</td>
<td>Types of data access rights (Z1, Z2 and Z3)</td>
</tr>
<tr>
<td>Sect. 200 (1), sentence 2, AO.</td>
<td>The taxpayer’s obligation to cooperate during the external auditor’s data access according to</td>
</tr>
<tr>
<td></td>
<td>Section 147, para. 6 of AO.</td>
</tr>
</tbody>
</table>
Legal Basis | Brief Overview
--- | ---
Section 14, para. 1 in conjunction with Section 3, no. 2 of the German Turnover Tax Act ("UStG"). | Invoices can also be transmitted electronically (that is, issued and received in an electronic format such as PDF) with the recipient’s consent.

In doing so, the authenticity of the origin of the invoice, the integrity of its content, and its readability must be ensured (for purposes of invoice verification).

Irrespective of this, authenticity of origin and integrity of content are deemed to be ensured in the following procedures:
1. Electronic invoice with a qualified signature or a qualified signature with provider accreditation in accordance with the German Digital Signature Act (last amended by Article 4 of the Act dated July 17, 2009)
2. Electronic data interchange (EDI), if the use of this procedure is provided for in the data interchange agreement at hand

Section 14b, UStG | Requirements for the retention period, as well as the manner of retention for electronic invoices within the EU territory and electronic access to this place by the German fiscal authorities.

Table 2: Overview of Legal Regulations on Data Access

As the reason for the introduction of data access rights in AO on January 1, 2002, the fiscal authorities cited increasingly paperless business transactions, the increased use of IT systems, and the introduction of qualified electronic signatures at companies.

From a VAT perspective, however, an electronic exchange of invoices without a signature or qualified signature (for example, an e-mail attachment in PDF format) is now permitted in addition to the already possible electronic data interchange (EDI) according to Article 2 of the 94/820/EC Commission Recommendation of 19 October, 1994, insofar as the authenticity of the origin of the invoices, the integrity of their content, and their readability is ensured. In both cases, the approval of the invoice recipient is necessary.

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23 Act to implement the Services Directive in commercial law and in other legislation dated July 17, 2009, BGBl. 2009 I p. 2091 – Amendment to the German Digital Signature Act.


26 Cf. Section 14, para. 1, sentence 7 of the German Value Added Tax Act

27 Cf. Section 14, para. 1, sentence 5 and para. 3, no. 2 of the German Value Added Tax Act.
Section 147, para. 2, no. 2 and para. 6 of AO obligate taxpayers to retain data, electronic documents, and other electronic materials (insofar as they are of importance for taxation) in a form that is always available, immediately readable, and compatible with automated evaluation. Furthermore, external auditors have the right to inspect this data (Z1/Z2 access) in the context of an external audit or to obtain data on automatically readable data media for evaluation (Z3 access).

### 3.1.2 EXTERNAL AUDITS WITHIN THE MEANING OF SECTION 147 OF AO

External audits to which the regulations of the right to data access within the meaning of Section 147, para. 6 of AO apply refer essentially to the following tax-related areas:

- **General auditing (or revenue / VAT auditing)**
  This includes such tax types as corporate income tax, personal income tax, capital gains tax, trade tax, reunification tax, and VAT. The main focus is on the balance sheet and profit and loss statement (P&L), statements about individual P&L items, general ledger accounts, subledger accounts for accounts receivable and payable, asset accounting data, securities (portfolio overviews, portfolio growth overview, acquisition/retirement lists, portfolio cash flows), inventory write-offs, and deprecations for insurance accounting.

  The fiscal authorities expect electronic data access to facilitate better reviews of transfer prices, provided that the corresponding documents are managed or exist in electronic form. On the one hand, the BMF assumes that Section 147, para. 6 of AO is applicable in the context of transfer price documentation. On the other hand, the documentation of profit allocations within the meaning of Section 90, para. 3 of AO involves arm’s length documentation, while Section 147, para. 6 of AO concerns the documentation of facts. The relationship between these two provisions is still unclear.

- **Auditing of insurance tax/fire department charges**
  Among other things, this involves balance sheet/P&L, general ledger accounts, and posting journals (particularly relating to contribution income), as well as statements about individual balance sheet and P&L items.

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28 Cf. the BMF statement dated April 12, 2005 on administration principles relating to the examination of income allocation between related parties in cross-border business relationships with respect to investigation and cooperation obligations, adjustments, and mutual agreement and EU arbitration (management principles procedures); ref. IV B 4 – S 1341 – 1/05, note 3.4.3, http://www.bundesfinanzministerium.de/Content/DE/Downloads/BMF_Schreiben/Internationales_Steuerrecht/Allgemeine_Informationen/2005-04-12-Verwaltungsgrundsaetze-Verfahren.pdf?__blob=publicationFile&v=3.
● **External income tax auditing**  
This relates to payroll accounts, payroll and travel expense settlements, balance sheets and P&L, general ledger accounts, and other aspects; it also includes statements about individual P&L items such as corporate events, entertainment expenses, voluntary social benefits, and gifts.

● **Special VAT auditing**  
This includes in particular the review of all sales accounts, VAT accounts, input tax accounts, and other operational income accounts, insofar as they are of importance for VAT verification.

● **Customs auditing**  
Following the release of the BMF decree dated November 28, 2007 within the meaning of Section 193 of AO, Section 33 of the Common Market Organization Implementation Act and Section 12 of the Common Agricultural Policy, this primarily includes customs audits of import duties on procurements from third countries, customs supervision, market regulation audits, and audits in accordance with Section 44 of the German Foreign Trade and Payments Act (Außenwirtschaftsgesetz).

● **Other auditing**  
Digital data access also applies to audits relating to excise duties (duties on electricity, oil, beer, spirits, etc.).

The review of VAT (Section 27b of VATA) and income tax (Section 42g of the German Income Tax Act) are not external audits within the meaning of Section 193 of AO. They are outside the scope of application of the data access rights in question. According to Section 27b, paragraph 3 of VATA and Section 42g, paragraph 4 of the German Income Tax Act, however, they can be passed on for external auditing.

### 3.2 BMF STATEMENT ON GOBD DATED NOVEMBER 14, 2014

#### 3.2.1 GENERAL INFORMATION

With its statement dated November 14, 2014, the German Federal Finance Ministry (BMF) published the "Rules concerning the orderly management and storage of books, records, and documents in electronic form and data access" (GoBD)\(^5\). In this statement, the BMF summarized the following previous BMF publications:

● "Generally accepted principles of computer-assisted accounting systems (GoBS)", dated January 7, 1995\(^6\)
● "Principles of data access and auditing of digital documents (GDPdU)", dated July 16, 2001 \(^{31}\) in the version dated September 14, 2012 \(^{32}\)

● Questions and answers about the data access right of fiscal authorities, as of January 22, 2009 (BMF FAQs) \(^{33}\)

The fiscal authorities informed the associations that the consolidation of the GoBS, GDPdU and BMF FAQs into one statement would not change the substantive legal situation or the administrative opinion represented, but clarifications and specifications had been made (by means of examples, for instance) and updates and adjustments carried out, albeit only in connection with related technical advancements.

The GoBD is to be applied to tax assessment periods starting after December 31, 2014, while the GoBS, GDPdU, and BMF FAQs only apply to tax assessment periods up to and including 2014 \(^{34}\). It is to be assumed from experience that audits are based on the GoBD, particularly if the audit period starts before January 1, 2015 and ends after December 31, 2014. Whether a more favorable audit will be imposed in such cases to the benefit of the taxpayer (which would be welcome) remains to be seen in practice.

However, it should be noted that in contrast to the GoBS statement \(^{9}\), the GoBD statement represents a purely tax-based perspective. The GoBS, which followed tax law up to now, were based on commercial law \(^{35}\).

For customs purposes, the BMF decree dated November 28, 2007 \(^{36}\), in which the requirements for customs documents were specified, continues to apply.

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\(^{31}\) loc. cit.

\(^{33}\) The BMF removed the BMF FAQs on GDPdU from the BMF website upon the release of GoBD. The document can be found here: http://elektronische-steuerpruefung.de/bmf/bmf-faqs-2009.pdf.

\(^{34}\) Cf. para. 183 of the GoBD (application regulation), loc. cit.

\(^{35}\) Cf. in particular Sections 238, 239, 257, and 261 of HGB in conjunction with Sections 145 – 147 of AO.

Regulations valid up to December 31, 2014

Figure 1: Hierarchy of Regulations Valid up to December 31, 2014

Regulations valid since January 1, 2015

Figure 2: Hierarchy of Regulations Valid from January 1, 2015

Source: Foreign Trade and Payments Ordinance ("AWV") lecture, "GoBD - Overview and information from a practical perspective", at the information events of the Chamber of Tax Advisors of Westphalia-Lippe on February 10, 2016 (in Bielefeld) and February 15, 2016 (in Schwerte).
The previous GoBS and the GoBD involved regulations published by fiscal authorities. Currently, it is not yet clear whether there will be two regulations in relation to it in the future – one for the German Commercial Code (for example, still the GoBS), and one for tax law (GoBD). It also remains to be seen whether the Institute of Public Auditors in Germany (IDW) will recommend the application of the GoBD as part of audit activities for year-end closings (for example).

The principle of cost-effectiveness is also mentioned for the first time in the GoBD statement. This must not jeopardize GoBD compliance. In particular, it does not justify:

- The breaching of basic principles of correctness and the significant jeopardizing of the purposes of accounting 38
- The use of software which does not meet or only partially meets the requirements laid down in GoBD for data medium transfer, which would restrict data access 39.

Taxpayers must be as prepared to accept the costs required to avoid such a risk, just as in the case of all other expenses made necessary by the nature of their operations 40.

3.2.2 OVERVIEW OF GOBD CONTENT

The statement contains 184 paragraphs. These relate primarily to the correctness of accounting and other necessary records, including with regard to the generally accepted principles of accounting (GoB) 41; the manner of retention of business documents which are to be retained due to fiscal provisions and non-fiscal provisions, insofar as they are of importance for taxation; and the retention of procedural documentation on the relevant IT systems, including internal control systems (ICS) and data access rights.

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38 Para. 29 of GoBD, loc. cit.
39 Para. 177 of GoBD, loc. cit.
40 BFH judgment dated March 26, 1968, ref.: IV 63/63, BStBl. 1963 II p. 527.
41 Codified in commercial law (Sections 238 – 263 of HGB) and in tax law (Sections 140 – 148, 154, and 158 of AO; Sections 4 ff. of EStG; R 5.2 of EStR (German income tax regulation).
The following representation indicates the key chapters explicitly described in these recommendations from the perspective of data access rights 42:

- General information regarding the retention of documents for fiscal and non-fiscal accounting purposes and record-keeping obligations, insofar as they are of importance for taxation (paragraphs 1 – 6 in conjunction with para. 20 on the subject of IT systems)

- Responsibility for the management of electronic records and accounts with regard to organizational and technical outsourcing (para. 21)

- General requirements such as the principles of traceability, verifiability, truth, completeness, accuracy, etc. with regard to immutability, especially in terms of time-dependent master data (paragraphs 58 – 60) and logging of changes (paragraphs 107 – 112)

- Data security/protection (paragraphs 103 – 106 in conjunction with paragraphs 167 – 169 and 172)

- Retention of business documents, especially in electronic form, while also factoring in compatibility with automated evaluation, scanning, and data outsourcing (paragraphs 113 – 144)

- Traceability and verifiability, especially with regard to procedural documentation (paragraphs 145 – 155) in conjunction with internal control systems (ICS; paragraphs 100 – 102)

- Data access (Z1, Z2, Z3), including making electronic documents readable (paragraphs 156 – 178)

- Certification and software attestation (paragraphs 179 – 181)

3.2.3 RETENTION OF DOCUMENTS

In this section, we will discuss the retention of documents for fiscal and non-fiscal accounting purposes and record-keeping obligations, insofar as they are of importance for taxation.

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42 Cf. statements on the scope of these recommendations with regard to GoBD in Chapter 1, paragraph 2.
In the general part of GoBD, it is apparent under para. 2 that the term "tax-relevant data", as it was used previously in connection with the GDPdU 43, no longer appears (at least in the GoBD).

The fiscal authorities differentiate between documents (for example, paper documents, electronic documents, and data) that arise due to fiscal accounting and record-keeping obligations and those that arise due to similar (but non-fiscal) requirements. They do so in accordance with the legal regulations of the German Fiscal Code and the country's special tax laws.

It should be noted at this point that the fiscal authorities assume that documents are also subject to retention 44 when they arise within the context of an accounting and record-keeping obligation, regardless of whether or not a retention obligation with a specified period is explicitly stated for them.

The core provision for documents subject to retention according to fiscal provisions is still Section 147, para. 1 of AO, which specifies the documents that are to be provided (insofar as they exist in electronic form) in the context of data access for external auditing. These documents include:

- Accounts and records, inventories, financial statements, management reports, the opening balance sheet (along with any instructions required to comprehend it), and other organizational documents
- Commercial or business letters that were received
- Duplicates of commercial or business letters that were sent
- Posting documents
- Documents in accordance with Article 15, para. 1 and Article 163 of the Customs Code of the Union 45
- Other documents, insofar as they are of importance for taxation

According to Section 147, para. 1, no. 5 of AO, other documents must be retained insofar as they are of importance for taxation. This also applies to electronic data received or generated by IT systems. According to the GoBD, other tax laws are also to

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44 Cf. para. 5 of GoBD, loc. cit.
45 Section 147, para. 1, no. 4a of AO, revised with effect from May 1, 2016 by the law dated December 22, 2014, BGBl. 2014 I p. 2417.
be considered, including Section 22 of VATA (on record-keeping obligations) and Section 41 of the German Income Tax Act (on record-keeping obligations for income tax deduction).

The GoBD stipulates the application of tax law to data, electronic documents, and other electronic materials that are to be retained according to non-fiscal accounting and record-keeping obligations, insofar as they are of importance for taxation. According to the fiscal authorities, this application arises from Section 140 of AO.  

This results in three audit steps:

1. Is there a non-fiscal accounting or record-keeping obligation?
2. If the answer to the first question is yes:
   Are these accounts and records of importance for taxation?
3. How long is the prescribed retention period according to the non-fiscal provision governing the accounting and recording-keeping obligation in question?

From some of the non-fiscal provisions listed as examples in the GoBD, no direct retention obligation arises from this law. For example, Section 42a, para. 1 of the German Limited Liability Companies Act (GmbHG) stipulates that a given company’s managing director must prepare a management report as part of each year-end closing. For the retention obligation for the management report itself, see Section 257, para. 1 in conjunction with para. 4 of HGB.

For the other aforementioned provisions – for example, the German Federal Weights and Measures Regulations, the German Driving Instructor Act (Fahrlehrergesetz), or the German Pharmaceutical Regulations (Apothekenbetriebsverordnung) – retention periods are specified for the records mentioned therein, but they are significantly shorter than the fiscal retention periods prescribed in Section 147, para. 3 of AO.

This may mean, especially for taxpayers whose closings have not been audited, that these non-fiscal documents subject to retention no longer exist at the time of an external audit. In various discussions, however, the fiscal authorities have cited Section 147, para. 3, sentence 2 of AO in asserting that the fiscal retention periods – that is, six- or 10-year periods – are to be applied in these cases. This does not apply insofar as the non-fiscal provisions contain an explicit control for premature destruction. It remains to be seen how this matter will continue to evolve.

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46 Para. 3 of GoBD, loc. cit.
47 The “fiscal” retention obligation for the management report is also derived in this respect from Section 147, para. 1, no. 1 in conjunction with para. 3 of AO.
Furthermore, whether and to what extent the fiscal authorities may also access documents subject to retention due to non-fiscal provisions from abroad (if they consider them relevant to taxation) is another open question.

![Diagram showing record-keeping obligations: Non-Fiscal and Fiscal](image)

Figure 3: Record-keeping Obligations: Non-Fiscal and Fiscal

In this context, it is also worth mentioning that the GoBD defines for the first time in para. 20 what is meant by IT systems or systems. In particular, these include main, feeder, and ancillary systems, as well as the interfaces that connect them. The description or size of the IT system in question is irrelevant.\(^{48}\)

The already familiar primary qualification right of the taxpayer also appears again in the GoBD statement.\(^{49}\) It states that the taxpayer must audit and qualify documents which are subject to retention according to the non-fiscal and fiscal regulations with regard to their importance for taxation. The primary qualification right was already contained in the GDPDU statement, as was the second qualification right of fiscal authorities, which may review the primary qualification right of the taxpayer as part of external audits.

This principle was also affirmed by a legally binding judgment of the Fiscal Court of Rhineland-Palatinate dated June 13, 2006.\(^{50}\) According to this judgment, data from cost centers is tax-relevant if it refers to the evaluation of investments, assets, or provisions, for example. However, the Fiscal Court also specified strict requirements for

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\(^{48}\) Cf. the non-exhaustive list in para. 20 of the GoBD statement, loc. cit.

\(^{49}\) Para. 6 of GoBD, loc. cit.

\(^{50}\) Fiscal Court of Rhineland-Palatinate, judgment dated June 13, 2006; ref. 1-K-1743/05, legally binding, https://dejure.org/2006,8614.
further access to other cost centers in which external auditors assume the existence of tax-relevant data. If the data required by external auditors is not only to be found in cost center accounting but – as in the judgment in question – is also included completely in the financial accounting of the company at hand, then according to the judge, the external auditors first have to use the options available to them through access types Z1 and Z3 to review the company’s financial accounting. It is only then that they may specifically access additional data pertaining to cost center accounting (in reference to the specification of auditing inquiries) 51.

It is not easy for readers of the GoBD to recognize the link between the primary and secondary qualification right because, contrary to the previous GDPdU statement 52, they were completely uncoupled in the GoBD. The secondary qualification right does not appear again until Chapter 11.1 of the GoBD (on the scope and exercise of the right to data access according to Section 147, para. 6 of AO), although the primary right of the taxpayer is referenced there again 53.

### 3.2.4 RESPONSIBILITY

The GoBD statement also addresses the responsibility for managing electronic records and accounts in terms of organizational and technical outsourcing 54.

Outsourcing refers to the outsourcing of tasks, functions, and processes associated with computer-assisted accounting systems to service firms.

Only one passage of the GoBD deals with outsourcing. Para. 21 establishes the principle that the taxpayer is solely responsible for the correctness of electronic accounts and other required electronic records within the meaning of data, electronic documents, and other documents that are subject to retention according to fiscal or non-fiscal provisions, insofar as they are of importance for taxation (including in terms of the procedures used).

This also applies to the partial or complete organizational and/or technical outsourcing of accounting and recording tasks to third parties. The term "third parties" refers to service firms, particularly tax consultants or tax consultancy firms, accountants, shared service centers of an independent legal form, operators of data centers, and IT service providers.

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51 Cf. example 1 for para. 5 of GoBD, loc. cit.
52 Cf. I., 1., paragraphs 3 and 4 of the BMF statement dated July 16, 2001, loc. cit.
53 Cf. para. 161 of GoBD, loc. cit.
54 Cf. para. 21 of GoBD, loc. cit.
With regard to the respective data access types (Z1, Z2, and Z3), the GoBD stipulates that in instances of outsourcing, an "authorized third party" commissioned by the tax-payer must ensure that corresponding data access can occur.\footnote{Paragraphs 165, 166, 172, 174, and 176 of GoBD, loc. cit.}

When accounting-related services are outsourced, the IDW statement on accounting "Generally accepted principles of accounting when outsourcing accounting-relevant services including cloud computing" (Grundsätze ordnungsmäßiger Buchführung bei Auslagerung von rechnungsrelevanten Dienstleistungen einschließlich Cloud-Computing) (IDW RS FAIT 5, dated November 4, 2015) is to be observed in addition to the GoBD.\footnote{Cf. Stefan Groß, Wolfgang Heinrich, Thorsten Brand, "Die GoBD in der Praxis – Ein Leitfaden für die Unternehmenspraxis" (The GoBD in Practice – A Guide for Corporate Practice), version 2.3, as of: March 13, 2017, http://www.psp.eu/media/allgemein/GoBD-Leitfaden_Version_2_3_FINAL.pdf.}

### 3.2.5 GENERAL REQUIREMENTS FOR IMMUTABILITY

In the context of general requirements such as the principles of traceability, verifiability, truth, completeness, and accuracy, the subject of immutability must also be considered.\footnote{Paragraphs 58 – 60 of GoBD, loc. cit.}

According to the GoBD, a posting or a record may not be changed here in such a manner that the original content can no longer be determined.\footnote{Para. 58 of GoBD, loc. cit.} It is also not permitted to make changes of a nature that allows for uncertainty as to whether they were made originally or at a later point in time.\footnote{Cf. Section 146, para. 4 of AO and Section 239, para. 3 of HGB.} Changes made to and deletions of electronic postings or records must thus be logged accordingly to fulfill the requirements of Section 146, para. 4 of AO or Section 239, para. 3 of HGB. This applies analogously to electronic documents and other electronic files that are not postings or records, but are subject to retention according to Section 147 of AO.\footnote{Para. 59 of GoBD, loc. cit.}

Reading between the lines of these GoBD formulations, a subject emerges that many have been aware of for years: time-dependent master data in IT systems. In our view, this topic has been disregarded in the past (at least in the early days of the GDPdU). At that time, the fiscal authorities were also of the opinion that a copy of a printed outgoing invoice was not needed because, in the context of data access, exact duplicates of electronically generated printed invoices could be reproduced at any time for external audits. It then very quickly became apparent in practice that this is not necessarily the case in most IT systems. In this respect, the example illustrated in para. 59 represents a typical practical case.
Master data changes are logged in the SAP ERP system. However, it can be time-consuming when it comes to reconstructing the status of an account master (subledger account/general ledger account) for a key date in the past. WG Data Access has asked SAP SE to implement functions that would provide a consolidated view of master data for a given key date.

3.2.6 DATA SECURITY/PROTECTION

This document’s examination of data security takes into account the obligations of taxpayers to protect their IT systems against losses and unauthorized entries and changes. The GoBD indicates that the specific form of a given data security approach and its description depend on the complexity and diversification of the business activities and organizational structure at hand, as well as the IT system in use.

Irrespective of this, data safety deficiencies lead to a formal restriction of accounting correctness if data, data records, electronic documents, or other electronic records can no longer be presented. The descriptions of procedures followed in the context of data security are considered part of procedural documentation.

The GoBD also stipulates further requirements relating to data security/protection in the context of presenting Z3 access.

- The ban on data downloads by the fiscal authorities was a new addition to the statement. This is based on practical experience, which has shown that the use of new data media technologies (for example, a USB stick) presents the risk of taxpayers no longer having a clear overview of the data that has been downloaded from their IT systems in the context of external audits.

For compliance reasons, however – particularly in terms of avoiding organizational negligence – it should be in the interest of the taxpayer to always know precisely which data has been sent. From the perspective of the fiscal authorities, the ban can also be seen as a means of protecting their external auditors.

- Instances in which tax auditors collect data media are also to be regarded as a data protection issue. This addition to the previous GDPdU statement, according to which the transfer of a data medium from the the taxpayer’s possession should normally occur only in agreement with the taxpayer, is a welcome one in principle.

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61 Para. 103 of GoBD, loc. cit.
62 Para. 106 of GoBD, loc. cit.
63 Para. 104 of GoBD, loc. cit.
64 Para. 106 of GoBD, loc. cit.
65 Para. 167 of GoBD, loc. cit.
66 Cf. Chapter 4.8.2.
67 Para. 168 of GoBD, loc. cit.
That said, this addition was formulated in such a manner that taxpayers ultimately have no way of always knowing of (much less preventing) such an action on the part of the auditor. The fiscal authorities assume that instances in which tax auditors collect data media are covered by tax secrecy. This view is also shared by the fiscal court case law.

- Other new provisions in the GoBD deal with professional confidentiality. This information is to be viewed from the perspective of tax secrecy within the meaning of Section 30 of AO in relation to data protection. Tax secrecy is a special form of data protection. In this respect, the German Federal Data Protection Act is overruled by Section 30 of AO. This order of precedence has been confirmed by various decisions of the fiscal courts.

Among other aspects, particular attention must be paid to stored datasets which do not contain content subject to recording and retention, and personal data or data subject to professional confidentiality (for example, attorneys, physicians, and the clergy; cf. Section 102 of AO). In this respect, the taxpayer is obliged to protect such data using appropriate access restrictions or digital redaction.

### 3.2.7 RETENTION OF DOCUMENTS IN ELECTRONIC FORM

In the chapter on retention in the GoBD, considerable attention is paid to the electronic retention of data, data records, electronic documents, and other electronic records. In practice, business records subject to retention are increasingly being retained electronically. From the perspective of the fiscal authorities, the following subjects:

- Automatic evaluability
- Electronic recording of paper documents (scanning)
- Data outsourcing

... play a major role here, which will be discussed in detail below.

Automatic evaluability relates to data, data records, electronic documents, and other electronic records which are subject to accounting and recording (and thus retention).

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69 Para. 172 of GoBD, loc. cit.
71 Para. 172 of GoBD, loc. cit.
72 Paragraphs 113-144 of GoBD, loc. cit.
The right of fiscal authorities to perform automated evaluations is based on Section 147, para. 6, sentence 2 in conjunction with para. 2, no. 2 of AO.

The AO does not specify what is to be understood by the term "automatic evaluability". In the GoBD, one attempt is made to define this term – unlike in the previous GDPdU statement or BMF FAQs about the GDPdU – from the perspective of the fiscal authorities.

When using the term automatic evaluability, the fiscal authorities always refer to direct access to all stored documents (including master data and links), which also includes the retrograde and progressive auditing methods from their perspective. In particular, mathematical/technical evaluations, full-text search, screen queries, and the tracking of links are considered forms of automated evaluation.

While data created in an IT system must be retained in its original format, incoming data can be converted to another format as long as its automatic evaluability is not restricted as a result. In this case, however, the original data or files must also be retained.

The fiscal authorities assess the nature and scope of automatic evaluability according to the actual information and documentation options at hand. They also allow the format of incoming invoices and other electronic documents to be converted (for example, TIFF to PDF or vice versa) as long as their automatic evaluability is not restricted as a result.

When converting electronic data (in the context of EDI or e-mail, for instance) to an in-house format, both versions are to be retained under the same index. This entails redundant data storage, which seems inappropriate if such conversions can be proven to rule out the loss of data.

In numerous passages in the GoBD, it is evident that the fiscal authorities have since gained practical experience with automatic evaluability. For the first time, they explicitly address the requirements of automatic evaluability for e-mails and allow conversion to in-house formats under the aforementioned restrictions. The requirement that the necessary structural information is to be provided in an automatically evaluable form in addition to the actual data does not signify a new feature, however, when compared to the GDPdU. At different points, the GoBD itself merely seeks to provide clarification.

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73 Loc. cit.
74 Loc. cit.
75 Paragraphs 125-129 of GoBD, loc. cit.
76 Para. 131 of GoBD, loc. cit.
The fact that the fiscal authorities have tried to describe the term "automatic evalua-

bility" in greater detail in the GoBD is a welcome sign. However, it remains to be seen

whether this definition is final from the authorities' perspective. In any case, it is so

far-reaching due to the generality and vagueness of its formulation that virtually all

files, formats, and other elements can be classified as evaluable.

This relates especially to the inclusion or requirement of the fiscal authorities regard-
ing full-text searches. In contrast to the previous view of the fiscal authorities (cf. FAQ
catalog on the data access rights of the fiscal authorities, Section III. 3., as of January
22, 2009 77), full-text search is now deemed to be an additional and unrestricted form
of automatic evaluableability 78. The fiscal authorities apparently assume that they are
now permitted to perform non-specific evaluations across multiple files. This means,

for example, that relevant information can be generated in e-mails, posting texts, or
travel expense settlements using any arbitrary keywords, such as names or account
details. The changed perspective of the fiscal authorities represents a tightening inso-
far as now, PDF files (for instance) have to be provided in a format compatible with
full-text search if they arrived or were created electronically in this manner.

Furthermore, it is necessary to ensure in the context of automatic evaluableability that the
procedure used to create the data medium and retain it corresponds to the GoBD 79 if
electronic data and data records (within the meaning of Sections 146 and 147, para. 1
of AO) are to be retained on automatically evaluable data media. This procedure must
ensure that availability, immediate readability, and automatic evaluableability are always
guaranteed during the retention period at hand.

To guarantee automatic evaluableability during exchanges of data media, the taxpayer
must provide a data record description in evaluable form as shown below under Sec-
tion 3.2.10. The auditing software IDEA®, which external auditors use on their own
computers, accesses this data record description when importing data, for example, to
automatically interpret the information on the meaning of fields in the context of the
data transferred 80.

The electronic recording of paper documents (scanning) was already included in the
GoBS 81 and has been carried over more or less as-is, particularly in terms of the or-
ganizational instructions regarding:

- Who may scan

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77 Loc. cit.
78 Para. 126 of GoBD, loc. cit.
79 Para. 118 in conjunction with para. 128 of GoBD, loc. cit.
80 Para. 128 of GoBD, loc. cit.
81 Cf. BMF statement dated November 7, 1995 under VIII. (Reproduction of documents on data me-
dia), loc. cit.
● When scanning takes place (when mail is received, for example, or during or upon completion of transaction processing)

● What documents are scanned

● Whether visual or content-related conformity with the original is required

● How quality control is to be performed with regard to readability and completeness

● How errors are to be logged.

The specific form of these organizational instructions is new in that it depends on the complexity and diversification of the business activities and organizational structure at hand, as well as the IT system in use\(^\text{82}\). This is due to the fact that the GoBD applies to both ends of the scale in the view of the fiscal authorities, from micro-businesses up to large companies.

The inclusion of an electronic signature or a timestamp on scans has been dispensed with for taxation purposes\(^\text{83}\). With regard to the previous requirement of a full color reproduction if color has an evidential function, clarifying examples (where negative amounts appear in red, for example) have been included in the GoBD\(^\text{84}\). Finally, it should be noted that substitute scanning is generally permitted as before, provided that dispensing with a given paper document does not hinder the possibility of traceability and verifiability\(^\text{85}\) (in reference to the reverse burden of proof).

The fiscal authorities’ requirements in the BMF statement\(^\text{86}\) concerning the outsourcing of data from production systems and for transitions between systems are not new. They were already included in the BMF FAQs\(^\text{87}\) and remain the subject of criticism from the associations\(^\text{88}\). For taxpayers’ companies with large data volumes, there is a need to relieve the active databases of the production systems in question in short time intervals and to transfer this data into a separate archive system in order to maintain efficient daily operations. There are, for example, no archive systems which contain quantitative and qualitative evaluations of the accounting systems or ERP sys-

\(^{82}\) Para. 136 of GoBD, loc. cit.

\(^{83}\) Para. 138 of GoBD, loc. cit.

\(^{84}\) Para. 137 of GoBD, loc. cit.

\(^{85}\) Para. 141 in conjunction with paragraphs 140 and 145 of GoBD, loc. cit.

\(^{86}\) Paragraphs 142 and 143 of GoBD, loc. cit.

\(^{87}\) Cf. BMF FAQs on data access rights, Ill. Questions 12 and 13, loc. cit.

tems to be relieved. The fiscal authorities should bear in mind that during the necessary relief periods observed for the databases of accounting or ERP systems, direct and indirect data access can only be provided on a limited basis.

3.2.8 PROCEDURE DOCUMENTATION IN CONJUNCTION WITH INTERNAL CONTROL SYSTEM

The key subjects regarding correct and secure accounting – internal control systems (ICS) and data security – are addressed in Sections 6\textsuperscript{89} and 7\textsuperscript{90} of the GoBD. The information on ICS is essentially limited to the finding that compliance with the regulatory provisions of Section 146 of AO necessitates controls which are to be set up, exercised, and logged by the taxpayer.

However, there is no systematic presentation of the structure and the elements of an internal control system or a definition of what constitutes the minimum scope or content of an ICS. The use of the term "ICS" thus remains even more vague than in the previous GoBD. The sections and aspects presented in the GoBD are only illustrative in nature and bear no direct relation to the other information in the GoBD.

Nevertheless, the GoBD requires the taxpayer to set up a functioning ICS. Its tasks consist of enabling the presentation of current and regularly applied procedural documentation on the IT system in use, which also includes a description of the backup procedure at hand.

The information on internal control systems\textsuperscript{91} and data security\textsuperscript{92} stipulates indirectly (but bindingly) that in order to comply with the regulatory provisions of Section 146 of AO and preserve the security of data and data records which are of importance for taxation, the fiscal authorities require taxpayers to set up and operate an effective ICS.

Therefore, the ICS extends objectively to all of a given taxpayer’s IT systems\textsuperscript{93} – regardless of their description or whether they are main, feeder, ancillary systems – where the data and data records that are of importance for taxation are entered, created, received, adopted, processed, stored, or transmitted. Procedural documentation must thus include the following content-related aspects of the ICS in question:

- Description of the IT system at a glance\textsuperscript{94}

\textsuperscript{89} Paragraphs 100-102 of GoBD, loc. cit.
\textsuperscript{90} Paragraphs 103-106 of GoBD, loc. cit.
\textsuperscript{91} Cf. loc. cit.
\textsuperscript{92} Cf. loc. cit.
\textsuperscript{93} Para. 20 of GoBD, loc. cit.
\textsuperscript{94} Para. 160 of GoBD, loc. cit.
● Description of the content, structure, sequence, and results of the IT procedure 95

● Description of the tables, fields with links, and existing evaluations of the IT system 96

● Description of the control mechanisms on changing and/or deleting electronic postings and records 97

● Description of the reception, recording, processing, retention, and reproduction of posting documents in electronic form 98

● Description of automatic posting procedures for continuous circumstances (for example, monthly depreciation postings) 99

● Description of the procedure for creating a data backup 100

● Description of the digitization of paper documents 101

● Description of the meaning of abbreviations, digits, letters, and symbols of the IT system 102

● Description of all system and procedural changes (seamlessly over time) 103.

In addition to the aforementioned specific content, there must also be a general description and corresponding documentation of the IT system, user(s), and technical operations at hand 104.

It is explicitly mentioned for the first time in the GoBD that procedural documentation is to be versioned in the event of changes 105. In the previous GoBS, it was possible to derive this from the requirement for procedural documentation "... which verifies both the current as well as the historical content of the procedure..." 106. In addition to the individual versions of procedural documentation, a traceable change history is also to be retained.

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95 Para. 151 of GoBD, loc. cit.
96 Para. 160 of GoBD, loc. cit.
97 Para. 60 of GoBD, loc. cit.
98 Para. 66 of GoBD, loc. cit.
99 Para. 81 of GoBD, loc. cit.
100 Para. 106 of GoBD, loc. cit.
101 Para. 136 of GoBD, loc. cit.
102 Para. 149 of GoBD, loc. cit.
103 Para. 150 of GoBD, loc. cit.
104 Para. 153 of GoBD, loc. cit.
105 Para. 154 of GoBD, loc. cit.
106 Cf. note 1.2 of GoBS (pt. 5), loc. cit.
3.2.9 DATA ACCESS TYPES INCLUDING MAKING ELECTRONIC DOCUMENTS READABLE

The BMF statement dated November 14, 2014 specifies the powers that the fiscal authorities are granted, especially by Section 147, para. 6 of AO. With respect to the GDPdU statement, the authorities have only made clarifications from their perspective – for example, that with Z1 access, they now reference the respective meta, master, and transaction data their access must cover; that Z3 access now extends to electronic documents and records; or that explicit components of the description standard are to be included in transfers of data media.

As in the past, external audits focus on records which are subject to record-keeping and retention according to the relevant fiscal and non-fiscal provisions, insofar as they are of importance for taxation. In particular, access to the data of financial accounting, asset accounting, payroll, and all feeder and ancillary systems, insofar as they are of importance for taxation, is to be provided for this purpose. The type of external audit is irrelevant here.

In addition to data, components of procedural documentation in particular must be available for presentation upon request to provide a complete overview of the IT system at hand, along with an understanding of how it operates. This includes an overview of all information in the IT system, including descriptions of tables, fields, links, and evaluations.

This information is required so that the fiscal authorities can check the primary qualification right exercised by the taxpayer and create formats for transfers of data media. In cases involving incorrect qualification data, the fiscal authorities can require, within their due discretion based on the secondary qualification right, that the taxpayer subsequently provide access to data that has been recorded and retained according to fiscal and non-fiscal provisions. Whether this can be actually done in practice depends on the archiving methods of each individual taxpayer.

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107 Para. 165 of GoBD, loc. cit.
108 Para. 167 of GoBD, loc. cit.
110 Para. 20 of GoBD, loc. cit.
External auditors may access all data/documents that have been electronically received or created in a given company's IT system, insofar as they are subject to retention and of importance for taxation. Three access types (Z1, Z2, and Z3) are available for this purpose. Auditors can also combine several of the options at their disposal. At the same time, however, they must always observe the principle of proportionality. This means that they are to choose the access type they deem to be commensurate with objective necessity, reliability, and practicality.

At this point, attention should be drawn to the principle of cost-effectiveness, which the fiscal authorities do not accept as justification for the use of software which does not meet or only partially meets the requirements for transfers of data media as stipulated in the GoBD and thus restricts their data access. In this context, the authorities cite fact that the taxpayer must bear the costs of providing data access \(^{112}\) (for example).

It remains to be noted that during a tax audit, the fiscal authorities may still request that data, documents, and records (insofar as they are of importance for taxation) be presented as previously, such as on paper or in another form of retention. This option can be exercised at the sole discretion of the external auditor in question. It can be assumed that in the near future, this alternative will be used less and less. Each taxpayer has to decide how to handle data access: for example, whether to contact the tax authorities or a tax consultant at an early stage to avoid misunderstandings about the external auditing procedure and to discuss it personally (if possible) with the external auditor in question.

The GoBD chapter on "Making Electronic Documents Readable" is based on the requirements of Section 147, para. 5 of AO and the BFH decision dated September 26, 2007 \(^{113}\).

In this decision, the BFH dealt with the issue of "using existing evaluation options" with regard to links of postings to documents in electronic form. This involved the release of such linked records in the context of the data access rights of fiscal authorities.

It did not cover the issue of whether the right to inspect linked documents in electronic form arises from the GDPdU (although the Fiscal Court of Duesseldorf \(^{113}\) made an extensive effort to justify this). The judges of the BFH have already derived the submission obligation in electronic form from Section 147, para. 5 of AO, which regulates how records subject to retention and submission (commercial letters, invoices, etc.) are to be made readable. According to these provisions, external auditors do not have

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112 Para. 177 of GoBD, loc. cit.
to settle for a printout, but may require the taxpayer to provide access to devices that produce electronic displays. The BFH, however, has not specified any specific method in this regard.

This results in the following practical implications:

- If an external auditor requires an "electronic" submission of such documents, the taxpayer must extend the auditor's access to include this authorization.

- However, any other form of "electronic" submission (for example, as an electronic document upon specific request or through configuration of read access to archived documents) is conceivable.

According to the BFH resolution dated September 26, 2007, companies are obliged to review these access options and also to set them up upon request.

In this respect, the chapter on "Making Electronic Documents Readable" serves solely as clarification and is to be observed in the context of all access types.

### 3.2.9.1 Direct Access (Z1 Access)

An external auditor has the right to independently access the taxpayer’s IT systems (provided they contain data of importance for taxation) through a user role configured for this purpose. The taxpayer must provide the hardware and software the external auditors need to inspect data and evaluate it in an automated fashion. Direct data access involves granting an auditor read-only access (including a sorting and filtering function) to the taxpayer’s IT systems to examine the following:

- Transaction data (for example, journal entries in financial accounting)

- Master data (for example, vendor master data, system data, and historical data in this context)

- Links (for example, between the document header and document line of an accounting document or other tables of a relational database).

The access rights in question also cover the evaluation options available in a given system. Here, "available evaluation options" can only include the evaluation programs and evaluation types actually used by the company in question in its IT system. These include the custom developments companies use to evaluate tax data, which must also be made accessible to the auditor. Among other things, attention must be paid to customer-developed analysis, which contain programming code that specifies the company code for which they can run.
In the BMF FAQ\textsuperscript{114} (Section II, question 1 in conjunction with Section III, question 13), the interpretation of the term “available evaluation options” was very broad. From this perspective, taxpayers should also provide standardized evaluation programs that are not installed in their IT systems, but are included in the functional scope of the corresponding software. This requirement was not included in the GoBD.

According to the fiscal authorities and depending on the specific circumstances, however, an external audit may continue to access an evaluation option which, although unused by the taxpayer, still exists in the IT system in question\textsuperscript{115}. Any such request constitutes a discretionary decision to be justified by the respective auditor. Taking the principle of proportionality of means into account, taxpayers cannot reasonably be expected to activate evaluation options which they neither use nor have had approved for productive use solely for audit purposes. When reviewing the principle of proportionality, the technical implementation and personnel required have to be taken into account\textsuperscript{116}.

A remote inquiry of the taxpayer from the fiscal authorities (read: online access) is excluded according to the BMF statement dated July 16, 2001\textsuperscript{117}.

### 3.2.9.2 Indirect Access (Z2 Access)

In instances of this type of access, auditors do not evaluate the data themselves in contrast to Z1, but require the taxpayer (or an authorized third party) to automatically evaluate the data according to their specifications using read-only access. Taxpayers are obliged to support external auditors\textsuperscript{118} by providing personnel familiar with the IT system at hand (see also the information on direct access, Z1\textsuperscript{119}). The GoBD statement has not resulted in any changes with regard to GDPdU requirements.

\textsuperscript{114} Loc. cit.
\textsuperscript{115} Para. 174 of GoBD, loc. cit.
\textsuperscript{117} Cf. Chapter I 1 a, loc. cit.
\textsuperscript{118} Cf. the cooperation obligations according to Section 200, para. 1, sentence 2 in conjunction with Section 147, para. 5 and para. 6, sentence 3 of AO.
\textsuperscript{119} Cf. Chapter 5.4.
3.2.9.3 Data Medium Transfer (Z3 Access)

External auditors may require the taxpayer to provide them with data which is of importance for taxation on a data medium for automatic evaluation. This also applies if the data is located outside of the taxpayer’s premises at a company authorized to perform the corresponding accounting (for example, a tax consultant) or on a system maintained by a data center operator 120.

For this form of data access, the fiscal authorities use the auditing software IDEA® and the interface SmartX throughout Germany; these tools are used solely on the systems of the fiscal authorities / computers of external auditors. If, as a result of the analysis of the data transferred to data media, there is, for example, evidence which seems to indicate that a more intensive review is required, or if the data provided on the data medium is inadequate for tax assessment, the auditor is authorized to use additional direct and indirect data access (Z1 / Z2). However, the auditor may also require a new medium containing data that has not been provided to date, but is of importance for taxation.

Data should always be saved on data media in an encrypted form to increase data protection/data security 121.

The auditor must return or destroy any data media received at the latest upon completion of the audit and once the assessments issued as a result of the audit take legal effect. Data on the auditor’s computers is to be deleted 122. The return of the data media should be monitored, in particular if there have been many requests for transfers of such media during the course of the audit 123.

3.2.10 DATA DESCRIPTION STANDARD

The law does not include any binding statements on data media or data formats. The GDPDu dated July 16, 2001 124 does not elaborate on them, either. The BMF FAQs 125 specify some data formats, including "SAP / AIS", which refers to the SAP audit format.

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120 Cf. the information on accessing data in other EU countries in Chapter 3.2.13.
121 Cf. Chapter 4.8.3.
122 BMF statement dated July 16, 2001, Section I 1 c, loc. cit.; BMF FAQs, Section II, question 5, loc. cit.
123 Cf. Chapter 4.6.4 and Chapter 4.8.2
124 Loc. cit.
125 Section II, questions 2 and 3, loc. cit.
The previous requirements were adopted without changes in the "Additional Information about the Data Medium Transfer" 126.

As part of transfers of data media, auditors have to be provided with the information required for evaluation (for example, format specifications, file structures, data field definitions, and internal and external links), which is known as the data record description.

The SAP audit format satisfies these requirements for the data record description. Link information is an integral part of DART extracts 127, which can be used as a source in providing such supplementary material to auditors. The SAP audit format can be interpreted by auditing software such as IDEA® or ACL 128.

The BMF promotes the specially developed XML format for the data record description as part of the automation of the IDEA® interface 129.

The proprietary XML format for the data record description is not obligatory for taxpayers. Each data format specified in the "Additional Information about Data Media Transfers" 126 serves this purpose. However, it should be noted that unlike the data file that is of importance for taxation, the existing XML data record description file itself cannot be read by the auditing software IDEA®. This format is also not specified as a data format in the BMF FAQs.

### 3.2.11 CUMULATIVE ACCESS

It is at the external auditor’s discretion to make use of access types Z1 to Z3 in parallel, in succession, or in another manner 130.

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127 Cf. DART segment TXW_RELA
128 IDEA® is used by the German fiscal authorities; ACL® is used by the Austrian fiscal authorities (for example).
129 ACL® cannot read this format.
130 Para. 164 of GoBD, loc. cit.
3.2.12 CERTIFICATION AND SOFTWARE ATTESTATION

In the context of the GoBD, the fiscal authorities also restated their opinion on certification and software attestations. Behind this still lies the question 131 (which was already posed in the FAQ catalog) as to whether the existing or planned IT system of the fiscal authorities can be certified as "GDPdU-compliant" – or "GoBD-compliant", as would likely be the case now – by said authorities. This notion also continues to be rejected by the fiscal authorities. The BMF has included in the GoBD a kind of evidentiary effect regulation according to which "certificates" or "attestations" of third parties can serve as a decision criterion for a given company when selecting a software product, but have no binding effect on the fiscal authorities 132.

3.2.13 VALIDITY OF DATA ACCESS AND SCOPE OF APPLICATION

In the context of external audits, the German fiscal authorities basically have the right to electronically access taxpayer data which is subject to retention according to fiscal or non-fiscal provisions, insofar as it is of importance for taxation.

The new regulations on data access in accordance with Sections 146, 147, and 200 of AO only have to be taken into consideration for domestic companies and business premises of foreign companies that are covered by the German Fiscal Code. Here, it should be noted again that it remains open as to whether and to what extent the fiscal authorities may also access documents subject to retention due to non-fiscal provisions from abroad if the authorities deem them important for taxation 133.

Up to the end of 2008, taxpayers to whom the regulations of the German Fiscal Code (AO) applied had to maintain and retain accounts and other necessary records within the scope of the AO (Section 146, para. 2, sentence 1). There were only very narrowly defined exceptions to this requirement (for example, when data entered in Germany was transmitted abroad for processing), which were regulated through administrative channels 134. It precluded accounting data from being maintained and retained solely on a server located abroad.

With the introduction of the German Annual Tax Act 2009 135 and the amendment introduced by the Annual Tax Act 2010 136, the legislature has created the possibility

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131 Cf. I., question 17 of the "FAQ Catalog on the Data Access Rights of the Fiscal Authorities of the BMF" (as of January 22, 2009).
132 Para. 181 of GoBD, loc. cit.
133 Cf. also Chapter 3.2.3 (on the retention of documents).
whereby taxpayers, under certain circumstances, may maintain and retain their electronic accounts and other necessary electronic records outside of the Federal Republic of Germany (Section 146, para. 2a, sentence 1 of AO). For this purpose, taxpayers must submit a written request for approval to the relevant fiscal authority.

The following conditions must be met in accordance with Section 146, para. 2a, sentence 2 of AO:

- The taxpayer must notify the relevant fiscal authority of the location of the data processing system in question and the name and address of any third party commissioned

- The taxpayer must have duly fulfilled the obligations arising from Sections 90, 93, 97, and 140 – 147, as well as Section 200, paragraphs 1 and 2 of AO

- Data access must be fully possible in accordance with Section 147, para. 6 of AO

- Taxation will not be adversely affected by the arrangement at hand.

If these circumstances change, the taxpayer must immediately inform the relevant fiscal authority. If this is not done or if the relocation takes place without approval from the relevant authority, a delay fee amounting to EUR 2,500 – 250,000 can be imposed on the taxpayer.\(^{137}\)

The accounting records must continue to remain within the jurisdiction covered by the AO (read: Germany) or be retained, insofar as they exist only in paper form.\(^{138}\) If the relocation of electronic accounts abroad, in addition to the ERP system, includes a connected electronic archive system (for example), this must be shown accordingly as part of the application within the meaning of Section 146, para 2a of AO. If the prerequisite within the meaning of Section 146, para. 2a of AO also exists for this archive system – especially unrestricted data access within the meaning of Section 147, para. 6 of AO – there is basically no argument against approval. If it is determined in a subsequent external audit, however, that access to this archive system is not possible, the fiscal authority will set a deadline by which data access must be implemented in order to avoid a delay fee within the meaning of Section 146, para. 2b of AO.

Data access for the fiscal authorities also exists in various forms in other countries (for example, Austria, France, Switzerland, Portugal, and the U.S.).\(^{139}\)

No comment is made in these recommendations on the regulations of other countries.

\(^{137}\) Cf. Sect. 146, para. 2b of AO

\(^{138}\) Cf. Section 146, para. 2, sentence 1 of AO, as well as identical directives issued by the Regional Tax Office of Munich/Nuremberg dated December 23, 2002, loc. cit.

\(^{139}\) Also see Chapter 5.5.1 DART Data Retention Tool.
3.2.14 FURTHER DEVELOPMENT OF GOBD

The BMF statement dated November 14, 2014 represents an ascertainment or interpretation of the legal regulation on data access (among other things), which is solely binding for the fiscal authorities. The extent to which the interpretation of the legal standards by the fiscal authorities and the measures on which they are based can be met and are lawful in individual cases can only be decided bindingly, as in the past, by the fiscal judicature. Each company has to decide for itself, whether it is prepared to comply with the principles demanded by the fiscal authorities or wants to seek final clarification through the fiscal courts.

In publishing the GoBD, the BMF informed the business associations and professional chambers that it intends to regularly adapt this letter in the future in response to technical progress, jurisprudence, and practical problems that occur in order to ensure that open questions and problems are discussed in a timely fashion. The BMF requests that the associations and chambers submit practical problems that are of general importance for its review.

We ask readers of these recommendations to support our ability to comply with this BMF request by reporting practical problems accordingly under WG "Data Access (GoBD/GDPdU)" on the DSAG Forum.

Furthermore, WG Data Access will continue its years-long dialog with the fiscal authorities to clarify doubts in the context of SAP applications.

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140 Some court judgments have specified these access rights more precisely, cf. Chapter 7.4.
141 https://www.dsag.de/arbeitsgremien/ag-datenzugriff-gobdgdpdu.
142 Cf. the status of the discussions with the fiscal authorities: https://www.dsag.de/arbeitsgremien/ag-gdpdu/details.
4. CHALLENGES OF THE IMPLEMENTATION OF THE DATA ACCESS RIGHT WITHIN THE MEANING OF GOBD

4.1 COMPANIES' INTERDISCIPLINARY DUTY

The implementation and customization of organizational measures as a result of the legal requirements of data access in accordance with the GoBD 143 is an interdisciplinary subject and thus cannot be handled by those in IT, finance, accounting, or taxation alone. From the perspective of WG Data Access 144, at least the following specialist areas/departments have to collaborate within companies or with external service providers on implementing the requirements of the GoBD:

- Tax departments
- IT departments
- Finance and accounting departments
- Internal auditing departments
- Data protection officers.

Combining the available expertise in operational procedures, stored data, system landscapes (feeder, main, and ancillary systems) in these areas, and the legal framework (for example, professional confidentiality obligations) is the only way to ensure that the following aspects are observed:

- Configuration and delimitation of auditor authorizations (for example, limiting the access period)
- Briefing of and ongoing support for external auditors during audits
- Immediate provision of access rights
- Provision of data which is of importance for taxation in an automatically evaluable form (for example, on data media).

These specialist areas/departments should already cooperate on preparing procedural documentation, including on the installation and implementation of an internal control system for IT systems which receive and/or create electronic documents that are...
of importance for taxation. Compliance with the requirements of the GoBD is a challenge, especially considering the globalization of business units or tasks – an IT relocation to India, for example, or the establishment of a finance shared service center for accounting tasks in Poland.

### 4.2 Vague Legal Concepts

The implementation of the legal requirements for digital access was considerably hindered by the vague legal concepts used in the legal text; in the BMF statement dated July 16, 2001; and in the BMF FAQ, which include the following:

- Tax-relevant data
- Automatic evaluability
- Arbitrary form of access
- Use of existing evaluation options
- Self-sufficient archive
- Data links (internal and external).

This led to legal uncertainty regarding the application of these requirements in practice.

As a result of the increase in external audits using access types Z1 to Z3, this legal uncertainty has lessened or been relativized to some extent due to the practical experience gained by external auditors and taxpayers, as well as to the relevant jurisprudence. Through the publication of the GoBD, the fiscal authorities tried to use clarifications and specifications to alleviate this issue, including by defining automatic evaluability.

Nevertheless, a certain amount of legal uncertainty will remain and there will be no universal solution for every ambiguous case that arises in the future.

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146 loc. cit.
147 loc. cit.
148 Cf. Chapter 7.4 on the topic of fiscal court decisions.
149 Cf. Chapter 3.2.7 and paragraphs 125 – 129 of GoBD, loc. cit.
**PRACTICAL TIP:**

We recommend that you always promptly document in a traceable manner the reason why a certain approach was chosen for the practical implementation of data access rights within the meaning of the GoBD.

This means that if questions are asked by auditors, possibly years after your decision, you will still have a means of recalling the corresponding reasons and supporting documents.

### 4.3 REQUIREMENTS FOR EXPLANATIONS OF BUSINESS TRANSACTIONS

In the GoBD, a posting text is not explicitly required for posting. This fiscal authority opinion was also not clearly identifiable from the GoBS. It is based on the BFH judgment dated May 12, 1966 [150] and the BFH judgment dated October 1, 1969 [151], which ruled that an informative posting text is required to sufficiently explain a given business transaction. The term "posting text" is not mentioned in either of the two judgments, but it is required (in accordance with Section 238, para. 1, sentence 2 of HGB) that a business transaction must be clearly explained for an expert third party by means of accounting records within a reasonable period of time.

For a micro-business which has accounting software and also stores posting documents in paper form in a folder, it is obvious that a posting text is necessary to sufficiently explain a given business transaction.

However, the sufficient explanation of the business transaction can be inferred in another manner in the case of companies which, for example, operate integrated ERP systems (with a drill-down function for electronic explanatory data stored in another module, for instance) or have electronic archive systems connected to their ERP system (offering direct access from a posting item to a stored scanned vendor invoice, for example). In this respect, a posting text is not mandatory in financial accounting.

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[150] Ref. IV 472/60, BStBl. III 1966 p. 372
[151] Ref. I R 73/66, BStBl. II 1970 p. 45
4.4 GENERAL INFORMATION ON THE PRIMARY QUALIFICATION RIGHT FOR ELECTRONIC DOCUMENTS

The GoBD clarifies that the taxpayer has to use the primary qualification right\(^{152}\) to determine\(^{153}\) the electronic records and paper documents that are of importance for taxation. For details on the retention of records and the relevant IT systems\(^{154}\) in this regard, see the information in Chapter 3.2.3.

In particular, electronic records in:

- Financial accounting (ledger entry and current accounts)
- Payroll
- Asset accounting,

...are to be fully provided for external audits as part of data access rights\(^{155}\).

The question which arises in practice is whether all electronic records in these accounts – for example, data from parallel financial reporting (US GAAP and IFRS), insofar as it is posted to separate ledgers or reconciled responsibly from HGB – are of importance for taxation\(^{156}\).

According to the GoBD, the electronic records of all feeder and ancillary systems are also to be provided for external auditing, insofar as they are of importance for taxation\(^{157}\).

\(^{152}\) Cf. para. 161 of GoBD, loc. cit.
\(^{153}\) Cf. para. 6 of GoBD, loc. cit.
\(^{154}\) Cf. para. 20 of GoBD, loc. cit.
\(^{155}\) Cf. para. 159 of GoBD, loc. cit.
\(^{156}\) For this purpose, the fiscal authorities refer to Section 158 of AEAO in connection with Section 200 of AO.
\(^{157}\) Cf. para. 118 in conjunction with paragraphs 3 – 5 of GoBD, loc. cit.
PRACTICAL TIP:

Possible audit sequence within the meaning of the primary qualification right:

- Is there a non-fiscal accounting or recording obligation according to HGB, Sections 41 ff. of the German Limited Liability Companies Act, the German Federal Weights and Measures Regulations, and/or Section 55 of the German Insurance Supervision Act (for example)?
- If so, are these accounts and records of importance for taxation?
- How long is the period of the retention obligation stipulated by non-fiscal provisions which regulate an accounting and recording obligation?\(^\text{158}\)

According to the prevailing opinion, these include the standard cross-industry SAP applications used in:

- Purchasing, inventory management, and order processing
- Processing invoices and credit notes
- Customs and foreign trade processing
- Cost accounting and results accounts

... where electronic documents are to be reviewed in terms of their importance for taxation. This data can be found primarily in the SAP core applications MM, SD, and CO.

The aforementioned functions can be mapped in a company-specific or industry-specific manner in upstream or downstream processes and/or systems, which must always be taken into consideration as a result.

It is incumbent upon companies to determine the scope of the electronic records which are of importance for taxation in the context of primary qualification and to take corresponding measures to ensure that external auditors can access only these records.

As taxpayers, companies are responsible for separating the electronic records which are of importance for taxation from non-relevant electronic records, insofar as they

\(^{158}\) See Chapter 3.2.3, page 26, point 3.
were received or created in the data processing systems of said companies or their service providers \(^{159}\).

Companies must obtain an overview of the tables and fields that contain data which is of importance for taxation. This is the actual challenge in identifying electronic records which are of importance for taxation and meeting the GoBD requirements in the relevant procedures and systems. For the SAP data model, the data catalog developed by WG Data Access for DART \(^{160}\) is available as a basis for identifying data that is of importance for taxation.

In addition to an accounting system maintained in SAP, there can be additional electronic records which are of importance for taxation in many application areas in a given company, as the following graphic shows:

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\(^{160}\) Cf. on the scope of the data catalog: SAP Note 582583 with stored MS EXCEL® spreadsheets with the segment and field catalogs for each DART release.
4.4.1 PROCEDURE FOR THE IDENTIFICATION OF IT SYSTEMS

Concerning the manner in which electronic records that are of importance for taxation are identified in a given taxpayer’s IT systems, particular consideration is given to the following procedures:

- Retrograde auditing method (primary application)
- Progressive auditing method (primary application)
- Qualification by means of commercial letter definition (as a supplementary measure).

Retrograde Auditing Method
According to the GoBD\(^{161}\), retrograde auditing starts, for example, with the balance sheet or profit and loss statement or tax registration/tax return, continues via the accounts, and ends with the document.

In practice, this means that the technical interfaces of upstream processes belong to the IT systems specified in the GoBD\(^{162}\). If electronic documents enter financial, asset, and payroll accounting via these interfaces, this may be an indication of their importance for taxation. It is then necessary to check whether the data processed in these upstream processes is in fact of importance for taxation.

The same applies if the financial accounting module in an ERP system provides a direct link to the other modules in the system – the drill-down function in the SAP ERP system, for example, which proceeds from the FI document to invoice documents in the MM module or to controlling documents in the CO module.

Progressive Auditing Method
A progressive audit proceeds on the basis of a situation requiring review and searches for corresponding mapping in the IT systems at hand. For example, an asset purchase based on a contract can lead to changes in activated assets (asset accounting) or inventories, which may also have consequences in an inventory management system.

Qualification by Means of Commercial Letter Definition
Based on the definition of the term "commercial letter" and its mandatory components\(^{163}\), it is possible to check which content always belongs to a commercial letter and is thus of importance for taxation.

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\(^{161}\) Cf. paragraphs 30-35 in conjunction with 145 – 150 of GoBD, loc. cit.
\(^{162}\) Cf. para. 20 of GoBD, loc. cit.
\(^{163}\) Cf. Section 257 of HGB.
Commercial letters are materials which document a commercial transaction. This applies in particular to all incoming and outgoing documents which relate to the preparation, conclusion, implementation, modification, or cancellation of a commercial transaction. The following are regarded as commercial and business letters:

- Invoices
- Quotations (if they result in orders)
- Purchase orders / orders
- Order confirmations
- Letters of credit
- Reminders
- Balance confirmations
- Bank statements.

It is necessary to determine that these examples, which are all of importance for taxation and can be found in the form of:

- Data
- Data records
- Electronic documents
- Other electronic materials

... were/are received in the IT systems at hand or were/are created in said systems.

Commercial letters do not include documents which did not result in the conclusion of a commercial transaction. It seems unproductive to wait to see whether a quotation or request actually results in a commercial transaction. This is why business correspondence is only subject to retention when it pertains to a commercial transaction. In each case, it is necessary to decide whether any documents produced in the course of this process will be retained completely for efficiency reasons.

Of these four options for tracing electronic documents which are of importance for taxation, the retrograde approach (i.e. proceeding from the balance sheet or profit and loss statement to the data sources in the IT systems at hand) has proven effective in practice.
**PRACTICAL TIP:**

The matrix form constitutes an approach to impact analysis where prominent balance sheet and P&L items are compared with the relevant systems and procedures. This enables all those involved to determine which IT systems and procedures are affected in very short order, even in the case of heterogeneous system landscapes.

Example of an impact analysis:

<table>
<thead>
<tr>
<th>BALANCE SHEET</th>
<th>ECC 6.00 - S/4/HANA</th>
<th>Customer consignment processing</th>
<th>DATEV</th>
<th>Banking software (e.g. SFirm)</th>
<th>MS EXCEL® supporting schedule</th>
<th>MS ACCESS® DB guarantees</th>
<th>Point-of-sale systems</th>
<th>Online shopping portal</th>
<th>EXCEL® calculation</th>
<th>Flat-rate value adjustments</th>
<th>Customs clearance system for import/export processing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Intangible assets</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Raw &amp; auxiliary materials &amp; consumables</td>
<td></td>
<td></td>
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<tr>
<td>Cash on hand</td>
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<tr>
<td>Banks</td>
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<tr>
<td>Account receivables</td>
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<tr>
<td>Provisions</td>
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<tr>
<td>Liabilities</td>
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<td>P&amp;L</td>
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<tr>
<td>Revenues</td>
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<td></td>
</tr>
</tbody>
</table>

Note: (1) = Relevant; (2) = Relevant for import/export processing only.
<table>
<thead>
<tr>
<th>Expenses for raw &amp; auxiliary materials &amp; consumables</th>
<th>ECC 6.00 - S/4/HANA</th>
<th>DATEV</th>
<th>Banking software (e.g. SFirm)</th>
<th>MS EXCEL® supporting schedule</th>
<th>MS ACCESS® DB guarantees</th>
<th>Point-of-sale systems</th>
<th>Online shopping portal</th>
<th>EXCEL® calculations</th>
<th>Flat-rate value adjustments</th>
<th>Customs clearance system for import / export processing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest income</td>
<td>•</td>
<td>•</td>
<td></td>
<td></td>
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<tr>
<td>Income from depreciation</td>
<td>•</td>
<td>•</td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>General provision for receivables</td>
<td>•</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Wages/Salaries</td>
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<tr>
<td>Expenses for employee retirement pension plan</td>
<td>•</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Depreciation</td>
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<td>etc.</td>
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</tr>
</tbody>
</table>

Table 3: Example of an impact analysis

Remarks on Table 3:

(1) - Consumption confirmations via e-mail with CSV file – customer development in SAP

(2) - Weekly incoming invoices in paper form and as ASCII file for BTCI processing
4.4.2 AUTOMATIC EVALUABILITY OF IDENTIFIED ELECTRONIC RECORDS

As described under "Retention of Documents in Electronic Form" in Chapter 3.2.7, the fiscal authorities always interpret the term "automatic evaluability" as direct access to all stored documents (including master data and links), which also includes the retrograde and progressive auditing method from the authorities' perspective. As forms of automatic evaluation, the GoBD specifies the following in particular 164:

- Mathematical/technical evaluations
- Full-text search
- Methods that allow an audit in the broadest sense even without mathematical/technical analyses (for example, screen queries).

4.4.2.1 Mathematical/Technical Evaluations

According to the definition in the GoBD, a mathematical/technical evaluation 165 means that all information contained in data and data records which are subject to recording and retention can be automatically interpreted (with the aid of computers), displayed, processed, and made available directly, without further conversion and processing steps and without any loss of information, to the other database applications and auditing software in use (for any necessary sorting, totaling, linking, and filtering purposes, for example).

The GoBD specifies the following as examples:

- Electronic compact (journal) recordings (for example, POS data, data from inventory management systems, physical inventory lists)
- Journal data from financial accounting or payroll
- Text files or files from spreadsheets with structured data in tabular form (for example, travel expense settlements or overtime sheets).

This involves, among other things, data or data streams in a structured form which, for example, can be imported in the context of Z3 access (data media transfer) in conjunction with the respective data record description in the auditing software IDEA for further automatic evaluation.

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164 Cf. para. 126 of GoBD, loc. cit.
PDF files which are generated from a word processing program or spreadsheet, for example, can lack specific functions provided by the original files (such as formulas). According to the GoBD, the respective original file with its full evaluation options is also to be retained in such cases \(^{166}\).

### 4.4.2.2 Full-Text Search

The previous view of the fiscal authorities regarding full-text search in the context of automatic evaluability \(^{167}\) has been changed in the GoBD such that full-text search is now to be regarded as a form of automatic evaluability. As a result, every electronic document which is of importance for taxation must be examined in terms of this function, regardless of whether it was received electronically by the company at hand or was generated electronically within the company \(^{168}\).

Incoming PDF files are to be retained in their original format to prevent, among other things, a possible restriction in their existing full-text search options.

PDF files generated within a company (for example, outgoing invoices) are to be retained in the format in which they were sent. If a full-text search is possible in a file, this evaluation option must be preserved. On the other hand, there is no obligation to add full-text search functionality that was not originally available.

If a PDF file is generated in the course of digitization (read: the scanning process) and its content is read via optical character recognition (OCR), this content is also to be retained regardless of whether it is saved in the PDF itself or in several files \(^{169}\). All related files are to be managed under a common index.

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\(^{166}\) Cf. para. 129 of GoBD, loc. cit.

\(^{167}\) Question III 3 on full-text search in BMF FAQs on GDPdU, loc. cit.

\(^{168}\) Cf. the details on this topic in Chapter 3.2.7.

\(^{169}\) Cf. paragraphs 130-131 of GoBD, loc. cit.
PRACTICAL TIP:

The existence of the full-text search option is to be checked in the case of incoming or generated PDF files in particular; this evaluation option is to be documented if it does not exist.

These documents can be stored as follows:

- Documents in a document management system (DMS) environment / optical archive environments
- E-mails with or without attachments in DMS environments / optical archive environments or e-mail systems
- Files in file systems (PC / network directory) \(^{170}\)

Companies must provide documentation that is subject to retention in the form they themselves use and are not obliged – if no full-text searching of file contents has been set up for their own purposes – to produce it specifically for the purposes of external audits.

4.4.2.3 Audits in the Broadest Sense (Without Mathematical/Technical Analyses)

By audits in the broadest sense, the GoBD refers in particular to screen queries, the tracking of links, and text searching according to specific input criteria \(^{171}\).

In practice, this type of auditing mainly occurs in the context of direct access (Z1) and indirect access (Z2) during digital external audits.

In addition to the transactions for calling evaluations, it is also necessary at this point to specify (insofar as they are of importance for taxation) the drill-down functions in SAP ERP systems, which are all contained in identical form in the standard auditor roles SAP_AUDITOR_TAX_*, and the display of links from the SAP document level to documents stored in the electronic archive at hand (for example, digitized incoming invoices).

\(^{170}\) Cf. however, para. 110 of GoBD, loc. cit.

\(^{171}\) Cf. para. 126 of GoBD, loc. cit.
The act of navigating from master data (for example, from the vendor or customer) in an SAP ERP environment to linked documents in:

- An archive
- An electronic file linked to said archive

... can be cited here as an example.

### 4.4.3 SPECIAL CASE: E-MAILS

#### 4.4.3.1 E-mails Which are Relevant for Taxation

In practice, e-mails and their content have increasingly taken on the documentation and verification function referenced by the GoBD. This can involve in particular commercial letters or posting instructions (for example, instructions for dissolving a provision with reason) which are of importance for taxation.

In addition, it must be pointed out that e-mails are also used in practice just as "envelopes" for attachments (i.e. as a means of transport). The fiscal authorities have also adopted this point of view in the GoBD, citing attached electronic invoices as an example.

However, there are indications that further information in these "envelopes" can again result in an obligation to retain such e-mails. This applies, for example, to the send date if it influences the calculation of a deadline, or to the default subject line specified by the customer within an e-invoice if it triggers automatic further processing.

In individual cases, taxpayers have to decide for themselves whether or not they regard the "envelope" as tax-relevant.

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172 Cf. para. 121 of GoBD, loc. cit.
173 Cf. the definition in Chapter 4.4.1.
4.4.3.2 Automatic Evaluability

In principle, e-mails are always automatically evaluable based on the aforementioned full-text search function, including in the case of both pure continuous text and e-mails with PDF attachments (for example).

In the case of e-mails that contain only continuous text and no attachments, conversion to an in-house format (that is, from MSG format to PDF format) is allowed provided that the full-text search option is preserved after the conversion and no content-related changes are made.\(^\text{174}\)

\(^\text{174}\) Cf. para. 129 of GoBD, loc. cit.
Therefore, e-mails that contain only continuous text and are of importance for taxation can be saved, for example, to an electronic archive as an evaluable document in PDF format in line with established practice. However, the principle still applies whereby incoming commercial or business letters and posting documents must be retained in the format in which they were received\(^\text{175}\). In this respect, the extent to which e-mails and their content perform a documentation function must be determined.

A pragmatic approach can thus be taken when choosing automatically evaluable electronic documents – for example, by accessing the (converted) data of the archive system at hand. However, the costs involved remain a factor because the original electronic documents must still be retained.

It depends on the individual case in question. Taxpayers have to make their own decisions regarding the format they will retain.

If e-mails which are, for example, of a commercial letter nature (such as invoices within the meaning of Section 14 of VATA) are to be provided with a qualified digital signature, automatic evaluability also relates to the signature and the results of the audit at hand.

### 4.4.4 SPECIAL TOPIC: SPREADSHEETS

#### 4.4.4.1 Spreadsheet Which is Important for Taxation

Some spreadsheets (for example, MS EXCEL\(^*\)) are relevant for taxation, as shown in Section 4.4.3.1. Calculations of provision amounts, interest, and amortization can be cited as examples of files from spreadsheet programs which are of importance for taxation.

In addition, it is also possible to come across in practice a spreadsheet which is just a data file (without calculation steps) – for example, data downloaded from SAP ERP 6.0 to MS EXCEL\(^*\) for transport (uploading) to a non-SAP system or vice versa. Taxpayers have to decide for themselves whether to retain such data files in accordance with the opinion of the fiscal authorities or to prove the congruence between their source and target systems by means of procedural or process documentation.

Auditing acceptability within the meaning of GoBD does not exist for spreadsheets that are subject to retention and of importance for taxation. This means that an MS EXCEL\(^*\) file (for example) can be changed without saving a change history that would make it possible to trace the changes over time. It is the responsibility of companies themselves to ensure auditing acceptability by means of suitable organizational

\(^{175}\) Cf. para. 131 of GoBD, loc. cit.
measures, such as by retaining an image file with time specifications (for example, in PDF or TIFF format) in addition to the original format so that an auditor can compare the image of the file with the file itself.

The retention location is also decisive in the context of meeting the GoBD's requirements. The storage of the aforementioned MS EXCEL® files (for example), as well as of all electronic documents which are of importance for taxation, may take place according to the GoBD in a file system (read: a local or network directory) only if additional measures are taken to ensure immutability while the legal retention obligation is in effect 176. Here, the fiscal authorities assume that immutability can be achieved as follows:

- On the hardware side, for example, by means of an immutable and forgery-proof data medium
- On the software side, for example, by means of histories and versioning, locking, automatic logging, or deletion indicators
- As an organization, for example, by implementing authorization concepts for access.

**PRACTICAL TIP:**

To ensure audit-proof retention of data, data records, electronic documents, and other electronic records, an existing DMS or optical archive in place at a given company should be used, as the requirements from the perspective of the fiscal authorities are met when using such procedures.

**4.4.4.2 Automatic Evaluability of Spreadsheet**

In the first step, the automatic evaluability of files from spreadsheet programs is only possible to a limited extent. A review carried out by an auditor can only be based on the visible formula for calculating cell contents in the original file.

For an experienced IT auditor, it is possible in a second step to import an MS EXCEL® file into another IT system for automatic further processing (the auditing software IDEA®, for example).

These types of files are automatically evaluable as structured files within the meaning of the aforementioned mathematical/technical form.

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176 Cf. para. 110, sentence 2 of GoBD, loc. cit.
4.4.5  SPECIAL TOPIC: WORD PROCESSING FILES

4.4.5.1  Word Processing Files Which Are of Importance for Taxation

If a given word processing system was previously used as a typewriter and its generated files were printed for transmission purposes, the word processing files have not been subject to retention in their original format (for example, MS WORD®).

This has been the case even when files containing tax information are involved; here, the importance for taxation has related to the real-world circumstances that actually occurred – for example, a signed contract, signed overtime sheets, or signed travel expense settlements based on printed Word files.

The retention obligation has thus related to printed documents or image formats (for example, an MS WORD® document converted to an image format such as a PDF, or a scanned image document). In principle, these provisions remain in effect following the publication of the GoBD.

Cases in which the aforementioned electronic documents are electronically signed (for example, by means of an electronic signature) are to be viewed in a different light. They must then be retained electronically along with the corresponding signatures.

The remarks concerning immutability and auditing acceptability for the duration of the legal retention period according to Chapter 4.4.4.1 (spreadsheets which are of importance for taxation) apply accordingly to word processing files.

4.4.5.2  Automatic Evaluability of Word Processing File

While the GoBD regards the automatic evaluability of word processing files, insofar as they are of importance for taxation, as given in terms of mathematical/technical analysis, this aspect generally needs to be assessed on a case-by-case basis as shown in Chapter 4.4.5.1.

Due to the full-text search functionality specified by GoBD as a form of automatic evaluability, however, word processing files (insofar as they are of importance for taxation) are initially subject to retention in this electronic form regardless of how they were signed.

If full-text searching is possible in the same manner following conversion to PDF format (for example), see the remarks in Chapter 4.4.3.2, Section 2 (on the automatic evaluability of e-mails that contain only continuous text).
4.4.6 SPECIAL TOPIC: DATABASES OUTSIDE OF SAP

The following information refers only to database systems, which support mathematical/technical evaluability within the meaning of the GoBD. With Office tools such as MS ACCESS® , complex office applications are often used which also have to be examined for tax relevance. The data volume at hand is typically too large to be processed with a spreadsheet program.

If the results from a database system of this kind constitute input for a company’s accounting department (for example, for the settlement of commissions or rebates, or warranty processing with bases for calculations of provisions), the data in the database system is of importance for taxation and is subject to the auditor’s right to data access.

In general, change histories cannot be found in these systems, nor can read-only access with write protection be configured for a defined period. Extensive programming skills are required to set up Z1 access to such databases.

**PRACTICAL TIP:**

Through periodic “freezing” and audit-proof storage of file versions (for example, in a DMS or electronic archive), properly designed processes can ensure compliance with the GoBD requirements and create a basis for transferring historical information on data media (Z3).

4.4.7 ELECTRONIC DOCUMENTS

Regarding electronic documents, the GoBD differentiates between data, data records, electronic documents, and other electronic records which are of importance for taxation.

In addition to the different requirements for automatic evaluability, the GoBD also stipulates different requirements for the electronic retention of these four different document types 177.

Here, it depends on whether the documents which are of importance for taxation are generated in the taxpayer’s IT systems or are electronically entered into said systems. This is essential to determining the format in which these electronic documents have to be retained for the duration of the legal retention period.

177 Cf. paragraphs 130-141 of GoBD, loc. cit.
In this context, the following principles apply:

- Incoming electronic commercial or business letters and posting documents must be retained in the format in which they were received (for example, invoices or bank statements in PDF or image format) \(^{178}\).

- Electronic documents generated in a given IT system (for example, compact (journal) recordings in feeder and ancillary systems, postings, generated data records for creating outgoing invoices) or data received in the system (through EDI, for example) must be retained in the original format.

- Documents generated in a given IT system (for example, outgoing invoices created as text documents \(^{179}\), electronically concluded contracts, commercial and business letters, or procedural documentation) are to be retained in the original format.

- From the standpoint of what can reasonably be expected, there can be no objection to taxpayers retaining only the paper-based versions of commercial and business letters which were electronically created and sent in paper form.

- When using cryptography techniques, it is necessary to ensure that encrypted documents are available in decrypted form in the IT system at hand. If signature authentication keys are used, they have to be retained. The obligation to retain keys expires when the respective documents no longer have to be retained.

- When converting documents subject to retention to an in-house format:
  - Both versions are to be archived
  - Assigned to the same storage record
  - Managed with the same index and
  - The converted version must be marked as such.

### 4.4.7.1 Organizational Instructions for the Digitization of Paper Invoices

For the electronic recording of paper documents (for example, the digitization of incoming invoices), the GoBD stipulates that organizational instructions are to be created and retained \(^{180}\).

\(^{178}\) Cf. Chapter 4.4.3.2.

\(^{179}\) Section 14b of VATA

\(^{180}\) Cf. the related details in Chapter 3.2.7, as well as paragraphs 136 – 141 of GoBD, loc. cit.
The German Federal Ministry for Economic Affairs and Energy (BMWi) issued a "Guide for the retention of electronic and electronically signed documents" (documentation no. 564), dated August 2007.\footnote{The document is no longer available on the ministry's website, but can be found through the following link: http://www.securepoint.de/fileadmin/securepoint/downloads/uma/bmwili-leitfaden.pdf.}

The document contains a checklist of audit steps for clarifying the "need to retain" and "structuring of retention". The guide deals only with the retention of electronic documents. The conversion of paper documents to electronic form is not discussed.

Regarding the digitization of paper invoices, a distinction is made between scanning and substitute scanning. With scanning, all originals are still retained in paper form. By contrast, substitute scanning involves continuing to retain in paper form only those originals:

- Whose retention obligation is specified in this form due to fiscal or non-fiscal provisions\footnote{Cf. para. 140 of GoBD, loc. cit.}
- Whose authenticity is not preserved through electronic retention (in reference to the reverse burden of proof)\footnote{Cf. Fiscal Court of Münster, judgment dated November 24, 2015; ref.: 14 K 1542/15 (substitute scanning), https://dejure.org/2015,43457.}

Since dispensing with paper documents must not hinder the possibility of traceability and verifiability, it is incumbent upon the taxpayer to decide which documents are to continue being retained in paper form after being scanned.

The German Federal Chamber of Tax Advisors (BStbK) and the German Association of Tax Advisors (DStV) have also developed a publication (dated March 2014) on this subject: "Sample Procedural Documentation on the Digitization and Electronic Retention of Documents, Including the Destruction of Paper Documents" ("Muster-Verfahrensdokumentation zur Digitalisierung und elektronischen Aufbewahrung von Belegen inkl. Vernichtung der Papierbelege")\footnote{Cf. http://www.bstbk.de/export/sites/standard/de/ressourcen/Dokumente/04_presse/publikationen/03_berufsrecht/49_Musterverfahrensdokumentation_Digitalisierung_und_Aufbewahrung_von_Belegen.pdf.}

For more information on the subject of procedural documentation, see also the BStbK document "FAQ Catalog on Sample Procedure Documentation", which contains questions and answers on the complete documentation of procedures (along with sample procedural documentation). This document deals only with the conversion and retention of paper-based original documents, not with the treatment of other documents.
taxpayers receive in electronic form (for example, electronic invoices, electronic bank statements, or e-mails) 185.

The two aforementioned documents are also based to some extent on the results of a simulation study entitled “Simulation Study of Substitute Scanning” (“Simulationstudie ersetzendes Scannen”), which was conducted in 2013 by the Research Center for Information System Design (ITeG) at the University of Kassel and DATEV eG.

In this study, substitute scanned invoices and documents were subjected to a practical test. Judges, attorneys, and experts tested the authenticity of substitute-scanned documents in simulated trials 186.

The final report 187 of this simulation study contains, among other things, this result: "The simulation study has shown that the judges accept scanned documents just as they would the respective paper copies. Scanned documents are problematic only in the event of disputes or doubt. Scanned documents are not rejected as unsuitable evidence. On the contrary, the court looks for indications of their authenticity or signs that reinforce doubt." (Reverse burden of proof) 180 183.

PRACTICAL TIP:

Retention of original documents:

- Customs documents, in particular export and import documents, insofar as official stamps with or without special color pigmentation are used
- Input tax refund procedures abroad – invoices that include foreign input tax, as some foreign tax authorities require original documents
- Invoices associated with business premises abroad Foreign authorities regularly require the submission of original documents (claiming costs as business expenses)
- Tax statements/tax receipts (especially domestic tax statements on dividend distributions and income on investments, as well as foreign withholding tax statements of any kind) and donation receipts for donations

186  A summary of the results can be found at: https://www.uni-kassel.de/eecs/iteg/forschung/abgeschlossene-projekte/simulationstudie-ersetzendes-scannen.html.
The RESISCAN project was initiated by the German Federal Office for Information Security (BSI) together with the German Federal Ministry of Finance (BMF) and the German Federal Ministry of Justice (BMJ), as well as representatives of various industries to address the substitute scanning of documents. The objective is to develop a technical directive for legally compliant substitute scanning.\(^{188}\)

**4.4.7.2 E-invoice**

Due to an EU initiative,\(^{189}\) contracting authorities will be obliged to accept and process electronic invoices from 2018 on. In this context, the Forum Electronic Invoicing in Germany (FeRD) has developed a common comprehensive format for electronic invoices entitled ZUGFeRD,\(^{190}\) which can be used to exchange invoices among companies, authorities, and consumers in Germany. There is currently no EU-wide standard. Other e-invoicing standards apply in other EU countries.

The ZUGFeRD invoice enables the exchange of structured data between invoicing parties and invoice recipients. It comprises two identical representations of a given invoice and its contents:

- An visual document format (PDF/A-3)
- A structured data format (XML).

The XML component can be used to embed specific processing data for an invoice in the PDF document and enable the recipient to extract this data directly for subsequent processing within an automated workflow (for example, invoice verification, account assignment, or payments). In particular, the VAT disclosures are defined as mandatory fields which – unlike with a purely paper- or PDF-based invoice – can be entered automatically into the invoicing process or imported as an XML file. This helps to ensure seamlessness and makes it possible to automate almost all of the invoicing and invoice verification process. According to the GoBD, automatic evaluability always relates to the entire content of the PDF/A-3 file, and thus also to the embedded XML file.\(^{191}\) In this respect, the XML file must be retained by invoice recipients for the duration of the legal retention period, regardless of whether they use it for automatic further processing.

The ZUGFeRD invoice is also to be archived in the same manner by the invoicing party for the duration of the legal retention period.

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\(^{190}\) Main user guide of the Forum Electronic Invoicing in Germany.

\(^{191}\) Cf. para. 125 of GoBD, loc. cit.
4.4.7.3  EDI and Its Importance for Taxation

The electronic transmission of commercial letters or posting documents is performed in many larger companies via EDI (electronic data interchange). In most cases, the received EDI files are forwarded to an ERP system for automatic further processing. Here, the EDI file basically has to be converted into an in-house format specified by the ERP system. The in-house format at SAP is called IDoc (Intermediate Document). The direct exchange of IDocs between the SAP systems of different companies is both possible and encountered in practice.

An EDI file/IDoc is of importance for taxation if its content involves an electronic commercial letter (for example, an incoming/outgoing invoice, delivery note, order, order confirmation, or quotation pertaining to an order). Furthermore, an EDI file/IDoc is of importance for taxation if its content has a documentation/confirmation function within the meaning of the GoB (no posting without a document; this does not mean the SAP posting document). Without the electronic approach, there are a variety of EDI files/IDocs that would exist as posting instructions in paper form (for example, a travel expense settlement which an external service provider handles for a given employee's employer, including EDI/IDoc transmission of the amount to be paid to the employee).

4.4.7.4  Obligation to Retain an EDI File/IDoc

If a given electronic document is of importance for taxation, the question arises as to what is to be done with an incoming EDI file in the EDI converter and the resulting IDoc (or with an incoming IDoc) in connection with the retention obligation. Here, the Institute of Auditors in Germany (IDW) assumes that both formats are to be stored within the meaning of GoB/GoBS. In this respect, the IDW opinion and GoBD requirements are in agreement.

If an EDI message is converted into an IDOC for further processing, an error may occur in some cases during further processing if the data content does not match that of the target system (when units of measure vary, for example). The IDoc must then be copied and the data content changed accordingly in the copy. The original IDoc and IDoc copy are technically related, form a unit, and are to be retained together.

Even if the result is identical in terms of content (read: no data is lost) and is available for automatic evaluability following conversion to an in-house format, the original version of a given file that was originally entered into an IT system must be retained.

192  Cf. IDW RS FAIT 2, Generally accepted principles of accounting when using electronic commerce, Chapter 5.5 (“Retention when using EDI”), para. 46 ff., WPg. 2003, p. 1258 ff.
193  Cf. para. 135 of GoBD, loc. cit.
Regardless of the legal basis, which calls for in-house formats to be retained according to the fiscal authorities and the IDW, it seems reasonable to question the usefulness of this legal requirement. Suitable proof that an original file and the in-house file generated from it match can be maintained via procedural documentation in combination with logging (ICS).

IDocs are not included in a DART extract in the standard SAP system because they cannot be mapped and represented in their technical structure in DART.

Furthermore, an EDI and the corresponding IDoc do not contain information on the company code in question in a separate field, but in a corresponding data section found at a lower level.

**PRACTICAL TIP:**

- For taxpayers that perform SAP data archiving to relieve their production databases, IDocs can also be accessed without DART for a subsequent audit in the system. This requires a link to the FI document to be defined in the archive information system 194 and established during SAP data archiving.

- Archived IDocs are accessed, for example, via transaction ALO1 (Document Relationship Browser), which displays the other documents/IDocs associated with the document at hand.

Ultimately, the decision rests with each taxpayer.

### 4.4.7.5 Further Information Relating to the Electronic Retention of Documents

The BMWi issued a guide on the retention of electronic and electronically signed documents 195.

Through its special interest group "Interpretation of GoB when using new organizational technologies", the Work Group for Economic Management Eschborn (AWV) also published sample procedural documentation on document storage (dated October 2015) based on its own initiative in close cooperation with numerous chambers of commerce and associations 196.

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194 Cf. Chapter 5.7.
195 Cf. "Guide on the retention of electronic and electronically signed documents" (documentation no. 564), loc. cit.
PRACTICAL TIP:

On the same webpage, the AWV provides a template in Word format for creating your own procedural documentation.¹⁹⁷

Companies can create their own procedural documentation based on this template. Depending on the complexity, document volume, and the IT used in each specific case, there may be very different requirements on the design of the document storage at hand and the extent of the documentation it contains.

4.5 PROCEDURAL DOCUMENTATION BY IT SYSTEM

4.5.1 NEED FOR SUCH DOCUMENTATION

In the GoBD, one of the main focuses of the fiscal authorities is on the procedural documentation of IT systems which receive or create electronic documents that are of importance for taxation. For related details, please see Chapter 3.2.8.

Even before the GoBD (during the time of the GoBS), the IDW's statements on financial reporting in the context of the Expert Committee on Information Technology had referred to the existence of procedural documentation on IT systems that were being used as organizational documents in accordance with Section 257, para. 1, no. 1 of HGB.

Creating and retaining procedural documentation is both advisable and in the interest of businesses themselves. Among other reasons, this is due to process changes, system migrations, and changes in technical responsibilities for IT systems (particularly when employees retire), which is where such documentation can help new employees get their bearings.

In addition, subjects such as governance and compliance also play a part. Procedural documentation includes important information for risk and quality management.

¹⁹⁸ Cf. for example, IDW statements:
4.5.2 Scope of Procedural Documentation

According to IDW and the GoBD's legal requirements\(^{199}\), procedural documentation consists of:

- User documentation
- Technical system documentation
- Operating documentation.

According to the prevailing opinion, this should also include a general description of the IT system in use.

The specific design of procedural documentation depends on the scope and diversity of\(^{200}\):

- The IT systems used
- The business activity in question
- Mapped business processes
- The organizational structure of the company at hand.

Procedural documentation usually consists of several documents or records. These documents or records already exist in practice at a given company, but were not previously summarized under the subject "procedural documentation".

It is nearly impossible to invest a proportionate amount of technical and organizational resources in creating and updating procedural documentation which is comprehensive and current in every detail. A certain amount of sense of proportion is thus required in such creation and maintenance efforts.

\(^{199}\) Cf. para. 153 of GoBD, loc. cit.
\(^{200}\) Cf. para. 151, last sentence of GoBD, loc. cit.
PRACTICAL TIP:

The recording of essential processes in a main document has proven effective in the context of creating and maintaining procedural documentation. It can also be maintained as a kind of table of contents which lists and refers to attachments.

Information associated with processes (for example, work instructions, technical documentation, and ICS) should be provided as modules in the form of attachments to the main document. This makes it possible to avoid investing too many resources in maintenance and updates.

The parts of the documentation to be updated are to be assigned clearly to those responsible.

Procedural documentation belongs to the work instructions and other documents of a given organization within the meaning of Section 147, para. 1, no. 1 of AO and Section 257, para. 1, no. 1 of HGB; it is to be retained for the legal retention period of 10 years according to Section 147, para. 3, sentence 1 of AO and Section 257, para. 4 of HGB. Since the GoBD stipulates documentation versioning and a traceable change history, the retention period starts at the end of the calendar year described by a given version of procedural documentation.

Versioning must clearly illustrate which form of processes was valid at a given time. Mid-year changes must thus also be documented in a timely manner.

PRACTICAL TIP:

Procedural documentation should include a list of changes which were made in the current version, either at the start or the end of the document.

4.5.3 CONTENT OF PROCEDURAL DOCUMENTATION

Examples (in keywords) are shown below to provide food for thought on the content or subject matter of the individual parts of procedural documentation.

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201 Cf. para. 154 of GoBD, loc. cit.
202 Cf. para. 154, sentences 1 and 2 of GoBD, loc. cit.
**General Description**

Information on:

- **Conditions** (for example, a description of the company)
- **Tasks** (for example, the purpose of the respective IT solution)
- **Area of applicability** (for example, a business area or department of the company).

In addition, this chapter should include information on:

- **Documentation of approval**
- **Authorization**
- **Updates**
- **Validity**

... for the procedural documentation in question.

**User Documentation**

- **Description of technical processes**
  - For example, data entry, auditing, reconciliation, exporting
- **Interface descriptions**
- **Legal requirements in exchanging data**
- **Organizational instructions**
  - For example, how to post a specific business transaction in an IT system or handle charts of accounts in their respective versions
- **User manuals.**
**Technical System Documentation**

Technical presentation of the system with regard to:

- All hardware components
- Their interfaces
- Interaction between individual system components
- Processing rules within programs
  
  For example, data flow diagrams, schedules, and logging
- Software components used, including customizing measures and system adjustments
  
  For example, when using SAP: in terms of COAT, cf. Chapter 5.6
- The stored data model of the respective software component
- The hardware components in use that are key to understanding the system.

**Operating Documentation**

This documentation contains instructions and documentation on:

- IT operations and IT security, in particular on:
  
  - Technical processes in normal operations
  - Emergency operations
  - Data security
  - On the authorization concept, including user management, access protection, and authentication
  - Migrations
- Controls and their underlying principles for setting up and changing procedures and systems in use, especially concerning:
  
  - ICS (particularly in describing roles, expertise, and responsibilities) 203
  - The change management procedure in place.

203 Cf. Chapter 3.2.8.
4.6 QUESTIONS/REMARKS ON ACCESS TYPES Z1 – Z3

4.6.1 OPTIONAL USE OF ACCESS TYPES Z1 – Z3

The external auditor is free to make use of access rights Z1/Z2 or Z3. These forms of access can be used alternately or in parallel. 204

With access types Z1, Z2, and Z3, the taxpayer has to qualify electronic documents with regard to their importance for taxation. 205

The separation of these electronic documents is also to be viewed primarily from the point of view of tax secrecy (within the meaning of Section 30 of AO) in relation to data protection. 206 Particular attention must be paid, for example, to stored electronic documents which do not contain content subject to recording and retention, personal information, or information subject to professional confidentiality (for example, in cases involving the clergy, attorneys, or physicians; cf. Section 102 of AO) 207. In this context, special mention should be made of electronic personnel, client, and patient files. The taxpayer is thus obliged to ensure data protection through appropriate access restrictions or digital redacting.

Keeping electronic documents separate and configuring access to them requires significant time and other resources which taxpayers themselves must invest due to their cooperation obligations in accordance with Section 200, para. 1, sentence 2 in conjunction with Section 147, para. 5 and para. 6, sentence 3 of AO 208.

PRACTICAL TIP:

Freeware for digital redacting is available on the Internet. In addition, computer magazines offer tips and tricks specifically for PDF files.

Before disclosing data, it is also possible to delete or obscure proprietary information (for example, from patient files) in the editable file. For auditing purposes, such procedures (which documents and data fields are affected, for instance) should be documented in detail.

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204 Cf. para. 164 of GoBD, loc. cit.
205 Cf. Chapter 4.4.
206 Cf. Chapter 3.2.6 (Data Security/Protection), loc. cit.
207 Cf. para. 172 of GoBD, loc. cit.
208 Cf. para. 171 of GoBD, loc. cit.
It remains to be noted that the factual scope of audits within the meaning of Section 194 of AO has not been extended by the three access types since the introduction of data access rights.

However, the intensity of audits has increased significantly due to the possibility of auditing entire datasets (instead of the previous random samples) and the evaluation options used by external auditors on taxpayers’ IT systems (Z1/Z2). The same applies to use of the auditing software IDEA® in the context of the data media transfers (Z3).

External auditors have the technical capabilities to analyze large amounts of data in short order; in paper-based audits, this would require a considerable amount of time.

External audits of individual taxpayers have become noticeably shorter as a result. Although it is not yet widely implemented, swift external auditing also allows for follow-up auditing of certain companies. In this respect, there is further potential to speed up current external audits.

4.6.2 DIRECT ACCESS (Z1)

For access type Z1, the taxpayer has to develop an authorization concept for read-only access and set up user roles for the external auditor in the relevant production systems. If, due to unrestricted authorizations, the external auditor can access electronic documents and/or transactions in the production system that are not of importance for taxation, the taxpayer cannot rely on any provisions banning the utilization of any knowledge acquired as a result.

Regarding direct access, the following must be clarified:

- How are the user roles to be set up and authorized? (Authorization concept)
- How can access to electronic documents which are not of importance be denied to the external auditor (including separation of legal entities by company code)?
- How can it be ensured that the external auditor cannot change electronic documents in the production system?

209 Cf. para. 158 of GoBD, loc. cit.
210 Section 147, para. 6 of AO came into effect on January 1, 2002.
211 An audit is considered timely according Section 4a, para. 1, sentence 2 of BpO (Germany’s tax audit regulations) if the audit period includes one or more current tax periods.
212 Cf. the recommendations on the authorization scope in Chapter 4.6.3, which refer to cases in which an employee of the taxpayer renders an evaluation for the external auditor.
213 Cf. para. 172, last sentence of GoBD, loc. cit.
214 Cf. para. 174, last sentence of GoBD, loc. cit.
(Read-only access)

- How can data access be restricted in the IT systems / procedures at hand during the audit period?
  (Periodic restriction)

- How can the auditor’s access be logged?
  (Record of auditor access)

The answers to these questions will be given in Chapter 5.4 as part of the technical implementation in SAP systems.

As part of their cooperation obligations, taxpayers must brief external auditors on the relationships and structures involved in their IT systems.

However, they must ensure in particular that procedural documentation on a given IT system can be provided upon request to provide a complete overview and understanding of the system.

This also includes an overview of all information in the IT system concerning documents that are subject to recording and retention (for example, descriptions of tables, fields, links, and evaluations). The fiscal authorities view this information as essential to reviewing the primary qualification right exercised by the taxpayer and/or establishing requirements for transfers of data media.

Whether application training in a given computer system is necessary depends on the individual skills of the auditor. The external auditor does not have to be given comprehensive training on how to operate an IT system. The fiscal authorities carry out in-house training on SAP systems.

As part of their data access, auditors have to be given information on the volume of documents available to them for the period of the audit at hand. In light of the immediate data access required according to the AO, the authorities should allow extensive evaluations to be postponed to off-peak times during the day or night. Interferences in day-to-day business operations can thus be avoided.

The implementation of data access requirements has proven to be exceptionally problematic due to the need to restrict access to the audit period at hand, which is a function that is generally not offered by the software systems used. Employees typically

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216 Cf. paragraphs 151 – 155 of GoBD, loc. cit.
217 Cf. para. 172 of GoBD, loc. cit.
218 Cf. para. 6 in conjunction with para. 161 of GoBD, loc. cit.
219 Cf. Sect. 146, para. 5 of AO
have open access to data in a given system, regardless of the period to which the data belongs.

Only a few systems support time restrictions on data access – either through technical implementation (for example, SAP ERP 6.0 or later) or by means of administrative regulations that outsource electronic documents subject to auditing to an evaluation system (for example, by creating annual tranches of tax-relevant data). In the latter case, the external auditor receives access rights to this outsourced dataset.

Generally, the external auditor is permitted to download data (for example, from SAP to the PC client provided by the taxpayer). External auditors are not permitted to transfer these electronic documents to an external data medium (for example, a USB stick)\textsuperscript{220}. Different approaches can be coordinated here in consultation with the taxpayer\textsuperscript{221}.

As these provisions suggest, companies face an urgent need to plan and implement authorizations for external auditors at an early stage. This should also include a review of whether customer-specific transactions access electronic documents which are of importance for taxation. These are to be included in customer-specific auditor roles; alternatively, the electronic documents are to be provided to the auditor in another appropriate form.

\textsuperscript{220} Cf. para. 167, last sentence of GoBD, loc. cit.
\textsuperscript{221} Cf. Chapter 4.6.4 on data media transfers
PRACTICAL TIP:

After their initial creation, auditor roles should be functionally checked in the quality assurance system at hand using a production-related dataset, and/or in the actual production system (as a final step):

- Do the auditor roles allow access to all relevant electronic documents which are of importance for taxation?
- Are the auditor roles designed to prevent access to electronic documents which are not of importance for taxation?
- Do the individual authorizations work as they should with the period-checking function (for example, when branching from one transaction to another)?

We also recommend performing periodic comparisons with the sample roles SAP_AUDITOR_TAX_*, which are provided by SAP in order to recognize changes that were made and include them in customer-specific auditor roles if necessary.

4.6.3 INDIRECT ACCESS (Z2)

In the case of Z2 access, one of the taxpayer’s employees carries out the evaluation of the data according to the specifications of the auditor.

PRACTICAL TIP:

The taxpayer’s employee should have a second user master in the production system with the same scope of authorization as the auditor. The employee can then give the auditor an introduction to the IT system based on his or her own knowledge.

Having the employee work with the same authorization scope as the external auditor ensures that the solutions to the questions specified in Section 4.6.2 are also considered in the context of Z2 access.

Due to restrictions on the auditor’s read-only access, however, it is also conceivable and useful in individual cases for a system administrator to allow the auditor to look at system data which can only be seen with system administrator access rights (Z2) in order to answer questions posed by the external auditor.
4.6.4 DATA MEDIA TRANSFER (Z3)

4.6.4.1 Basic Information on Z3

The following has to be clarified for transfers of data media:

- How can the scope of the electronic documents which are of importance for taxation and are to be transferred be defined along with the auditor so that specific answers can be given to the questions posed by the auditor?

- How can you determine whether the data format of a given system can be processed by the auditing software IDEA®?

- How can you guarantee the completeness/reconcilability of the data to be transferred?

The solution to the first question requires discussions with the auditor to precisely define the required scope of data and the level of detail based on his or her intended audit procedures. Among other things, this should enable the taxpayer to avoid expending unnecessary resources on carrying out redundant data evaluations or creating multiple data media in an attempt to produce acceptable responses to queries that were not sufficiently specified by the auditor.

In the context of data media transfers in recent years, it should also be noted that the fiscal authorities have developed standardized and structured legal requirements for queries to ensure uniform evaluation in the auditing software IDEA®, regardless of the taxpayer, the systems at hand, or their characteristics.

Following obligations that were previously in place at the state level, data requirements for Z3 access in SAP systems have since emerged that apply throughout Germany. The application of this nation-wide data requirement is currently still optional for auditors.

The answers to the second and third questions are provided in connection with the technical implementation in SAP systems in Chapter 5.

In practice, companies often face the impossible task of allowing an external auditor access (types Z1 to Z3) to all electronic documents which are of importance for taxation over a retention period of 10 years. A company’s ability to do so essentially depends, for example, on archiving cycles and any temporal restructuring measures taken in the production database at hand.

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222 Previously the "Brunswick model", along with corresponding modified models in individual German states (for example, North Rhine-Westphalia, Baden-Wuerttemberg, and Bavaria).
PRACTICAL TIP:

In practice, audit situations have arisen in which the external auditor requested that all financial accounting data be handed over on data media without having posed a specified query.

It is thus advisable to determine, along with the external auditor, which electronic documents that are of importance for taxation are required for each factual analysis.

We also recommend encrypting the data to be transferred. This should be coordinated in advance with the external auditor.

Before handing data media over to the external auditor, you should create a copy for your records. On the basis of this copy, it is easier to understand how the external auditor evaluated the data in the resulting findings. If necessary, a database can also be evaluated within the respective company.

Data media are to be created by the taxpayer in accordance with the specifications of the external auditor. The taxpayer also decides on the form (medium) in which data will be transferred (DVD, USB stick, external USB hard disk, etc.).

The external auditor is allowed to save electronic documents in a given IT system to the PC client provided by the taxpayer. However, the taxpayer alone creates the medium containing the data to be transferred 223.

Companies should thus establish a process for furnishing external auditors with electronic documents they have downloaded from a PC client (in MS-EXCEL®, for example) for further processing purposes. This process is to be defined not only in accordance with tax law, but with basic compliance considerations, as well.

Meanwhile, data media transfers also include the transfer of electronic documents from the taxpayer’s possession. This should be done in coordination with the taxpayer, however 224.

To retain an overview of the data media and content transferred to an auditor in the context of an external tax audit, we recommend that you document the process.

Upon completion of the external audit, the transfer logs can be used to request the return or destruction of the data media 225.

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223 Cf. para. 167, last sentence of GoBD, loc. cit.
224 Cf. para. 168 of GoBD, loc. cit.
225 Cf. para. 169 of GoBD, loc. cit.
4.6.4.2 Behavior When Extending the DART Data Catalog

Companies that use corresponding software also face key questions in this regard:

- Does a new version of SAP DART have to be installed?
- At what intervals should the new version be installed?
- Do data media have to be transferred to external auditors using the latest version of DART?

To answer the above questions, different application scenarios must be considered:

a) The system to be audited is no longer a current production system and is only available as an information system.

b) The audit will take place in a current production system.

Legacy systems (a) are usually no longer supplied with updates (for example, new DART versions). The current version of DART would thus not be available in the system. As pure information systems are involved, updating is not recommended here either; it may even be technically impossible, since other underlying components would also have to be updated in some cases. For this reason, we believe that these systems should be audited based on the DART version available in the system.

With production systems (b), it can often be seen in practice that support packages are not up-to-date; indeed, more than a year may have passed since the latest update. The upgrade strategy of a company depends on operational requirements and is not tailored to the delivery cycles of individual applications in a given SAP component.

In systems which are not at the current maintenance level, an auditor also cannot require that new DART versions be imported because later versions may entail considerable technical and business ramifications depending on the chosen update path. In addition, this would require unplanned operational costs (in terms of time and content) for testing upgrades before going live.

These considerations notwithstanding, WG Data Access (cf. Chapter 5.5) recommends that you update DART to the current version on an annual basis before creating annual extracts (or before creating extracts for special periods, master data, and change documents when extracting during an ongoing year).

The DART version available at the time of extraction is the "evaluation option available in the system". Future versions of DART may come with an extended data catalog that would then be including in corresponding DART extracts. In this respect, there are different generations of DART extracts.
If the auditor requests their regeneration based on the latest DART data catalog, this can only be implemented if all data relevant to the extract is available in the resident database. DART data extractions do not access archived datasets.

Situations in which taxpayers want to regenerate old data extracts also entail additional runtimes and system load. It is necessary to decide in individual cases whether the knowledge gained from regenerated data extracts is important enough and the burden on the taxpayer negligible enough to justify this step.

In our opinion, you should check whether alternative means are available to transfer this additional information to the external auditor in individual cases (see Chapter 5.7, for example, for cases in which data has already been partially or entirely archived).

4.7 SPECIAL TOPICS WITHIN THE SCOPE OF DATA ACCESS

4.7.1 ACCESS TO ARCHIVES

4.7.1.1 Indexing / Attribute Assignment of Stored Electronic Documents

In many companies, electronic archives (for example, optical archives or DMS) are used in addition to ERP systems, mainly for storing electronic documents which are of importance for taxation in a readable and automatically evaluable form for the legal duration of the retention period. This applies particularly to electronic documents (including scans and other digitized documents) which are related to the posting material in the IT system at hand.

Depending on the company, these archive systems may be connected to other IT systems or operated as standalone systems.

Basically, electronic documents are indexed and assigned attributes in the archiving systems themselves. An "self-supporting" archive. If a given system is connected to an IT system (for example, SAP), indexing/attribute assignment takes place via this IT system.
PRACTICAL TIP:

In the case of an electronic archive or DMS connected to an ERP system, attributes should be assigned to electronic documents in the archive itself, even if the documents have already been associated with search terms via the ERP system.

The system guarantees auditing acceptability by ensuring that electronic documents are retained as-is in the optical archives or DMS at hand and can be found again by means of a search index. In this respect, the retrograde auditing method \footnote{Auditing from postings back to documents (retrograde method).} is guaranteed in the context of the traceability and verifiability of a given business transaction \footnote{Cf. paragraphs 145-146 of GoBD, loc. cit.}.

If the connection between an ERP system and its optical archives or DMS is eventually deactivated (for example, when the ERP system is decommissioned), the electronic documents at hand can be found again by searching the optical archive.

4.7.1.2 The Importance of Electronic Archives for Taxation

The documents subject to retention which are of importance for taxation result from Section 147, para. 1 of AO (for example, received commercial letters such as invoices and orders, as well as original posting documents) \footnote{Cf. the related details in Chapter 4.6.2/4.6.3 in conjunction with Chapter 3.2.3.}. Access to these documents is to be granted in electronic form according to Section 147, para. 5 of AO if they are retained in the form of an image carrier or on another data medium (DVD, hard disk, etc.) \footnote{A concurring opinion is also evident in the BFH decision dated September 26, 2007, loc. cit.; cf. Chapter 7.4 on related fiscal court judgments.}. Here, the auditor is to be provided with the tools required to make these documents readable at the taxpayer's expense \footnote{Cf. Sect. 147, para. 6, last sentence of AO}. In the BFH decision dated September 26, 2007, the term "the tools" indicates that the external auditor is to be given access to the electronic documents in an electronic archive by means of the technical functions available in the taxpayer's system. The BFH points out that the right to electronic inspection was not first introduced by the data access rights provided by Section 147, para. 6 of AO; it already existed based on the legal wording of Section 200, para. 1, sentence 2 in conjunction with Section 147, para. 5, clause 1 of AO.
4.7.1.3 Access to Documents in Electronic Archives (Z1 / Z2)

When accessing electronic documents which are of importance for taxation, the same conditions as for Z1 access to an accounting system or ERP system apply to the electronic archive in question\(^{232}\). In particular, a solution must also be found here to restrict access to the fiscal years of the period under review in accordance with auditing regulations.

If access is to be granted via an ERP system which already capable of periodic restriction (for example, SAP), this issue is basically solved.

If, on the other hand, an electronic archive is to be accessed directly, the period of access has to be restricted there (if technically feasible). In both cases, the auditor has to be provided with read-only access.

Access to the electronic archive has to be set up in such a manner that the external auditor can only access documents that are of importance for taxation and mainly relate to the postings in the ERP system, especially in the case of direct access to the electronic archive (Z1 access in an automatic archive).

The documents in the electronic archive that are of no importance for taxation – especially personal documents, such as letters of reference and other materials found in electronic personnel files – have to be protected accordingly from such access. This means that the classification has to be already made by the taxpayer when configuring the relevant documents in the electronic archive in order to control access rights by means of an authorization concept.

**PRACTICAL TIP:**

If, in addition to invoices, other documents are scanned and assigned (read: linked) to a posting document, we recommend that you ensure that differentiated document types are set up and scanned documents are assigned accordingly.

4.7.2 SYSTEM MIGRATIONS

The term "system migrations" refers to the following changes (among others):

- Company code mergers
- Conversions to local currency

\(^{232}\) Cf. also Chapter 4.6.2.
- Account number conversions
- Efforts to harmonize charts of accounts
- Migrations to a new general ledger.

These changes affect key values and field content in the database such that no conclusion can be drawn in relation to the original key/field content.

**PRACTICAL TIP:**

In order to present content both before and after a system migration for an auditor, we recommend that you create DART extracts immediately before and after the migration \(^{233}\).

These DART extracts can also be used as internal documentation of the system migration.

### 4.7.3 OUTSOURCING OF ELECTRONIC DOCUMENTS FROM AN IT SYSTEM

Electronic documents can be outsourced from an IT system within the system landscape in question or in an independent third-party system.

In the former case, you must check whether it is possible to display electronic documents that are of importance for taxation in the same manner as in the previous production system.

These display options may be limited in independent third-party systems.

The regulation in para. 142 of the GoBD on the outsourcing of electronic documents from production systems, which was already covered in the BMF FAQs \(^{234}\), remains a subject worthy of criticism.

For taxpayers' companies with large data volumes, there is a need to relieve the active databases of the respective production systems in short time intervals and to transfer electronic documents which are of importance for taxation to an electronic archive (for example) in a readable and automatically evaluable form in order to maintain efficient daily operations.

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\(^{233}\) The extracts should be taken after system operations cease and again before they are resumed.

\(^{234}\) loc. cit.
For certain data types and quantities, for instance, there are no archive systems which support the kind of quantitative and qualitative evaluations performed by the IT systems to be relieved. Therefore, the fiscal authorities’ requests for direct access (Z1) to outsourced electronic documents which are of importance for taxation are not practical, as they require evaluation options that are quantitatively and qualitatively identical to those available in the corresponding production system 235.

There are cost-intensive variants (for example, a virtual mirrored system) that present only a snapshot on a given balance sheet date, which seems questionable with regard to regular database restructuring and the principle of proportionality. These considerations always depend on the case at hand, and the decision ultimately rests with the taxpayer.

The fiscal authorities should bear in mind that during necessary database relief periods in an IT system, only limited direct and indirect data can be provided.

**PRACTICAL TIP:**

For the technical outsourcing of electronic documents relevant to taxation from a production system and during system transitions, the fiscal authorities’ requirements (regarding quantitatively and qualitatively equivalent transfers in accordance with the regulatory provisions 236) are always feasible thanks to the option to transfer data media (Z3 237, via SAP DART, for example).

If possible, this should be coordinated with the external auditor.

### 4.7.4 IT SYSTEM TRANSITIONS AND SHUTDOWNS

For system shutdowns, interruptions, and migrations, the fiscal authorities still insist that a target system 238 offer the same evaluation options in quantitative and qualitative terms 239.

Otherwise, the taxpayer is obliged to maintain the hardware and software of the legacy system, including the electronic documents that are of importance for taxation, for the duration of the retention period 240.

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235 Cf. para. 142, no. 2 of GoBD, loc. cit., which is still rejected by the associations and chambers.
236 Within the meaning of Sections 145-147 of AO.
237 Cf. para. 142, no. 1 in conjunction with para. 128, last sentence of GoBD, loc. cit.
238 Cf. para. 142 of GoBD, loc. cit.
239 Cf. the practical tip in Chapter 4.7.4.2.
240 Cf. para. 143 of GoBD, loc. cit.
In practice, quantitative and qualitative evaluations include (for example) SAP reports/programs which must be available in the same manner following a migration from SAP R/3 (from version 4.7 to ECC 6.0, for instance) according to this stipulation. These requirements are as impractical as the fiscal authorities demanding that the original hardware and software of a production system otherwise be retained for the duration of the retention period.

This often fails because of technical obstacles (for example, the lack of a guarantee on the functionality of hardware components) or organizational issues (such as when related expertise has left the company).

Procedural documentation, including corresponding versioning and histories, is of particular importance when replacing or shutting down systems. It must be retained for at least 10 years as an organizational instructions according to Section 147, para. 1, no. 1 in conjunction with Section 3, no. 1 of AO at the end of the calendar year in which the respective IT system is shut down or replaced.

For further information on procedural documentation, see Chapter 4.5.

### 4.7.4.1 Systematization of IT System Transitions and Shutdowns

Many aspects have to be taken into consideration when switching between and shutting down IT systems. The following diagram classifies the different practical cases that are possible:
Figure 6: Systematization for System Switch/Shutdown/Decommissioning

Explanation of overview of system interruption/shutdown cases:

<table>
<thead>
<tr>
<th>Case</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>①</td>
<td>The electronic documents of the ERP system to be shut down are not transferred to any replacement systems, as the company has ceased doing business: (Voluntary) Operational shutdown/closing down of a company, or insolvency</td>
</tr>
</tbody>
</table>
### Case Description

2. If all electronic documents in a system to be shut down are transferred, it is unnecessary to retain the electronic documents from the legacy systems for the external auditor (provided that they can be evaluated with the same functional scope as the system that was shut down). The requirements of the auditor with regard to data access can also be satisfied by the IT system which has received the electronic documents.

3. It is not possible to access SAP data extracts of a source system from non-SAP systems. Either another SAP system must be kept to evaluate the data extracts or an extract splitter must be used (for example, due to Germany's country-wide data requirement for SAP systems) to provide the electronic documents in the extracts for subsequent evaluation by an evaluation tool before deactivating the SAP system.

4. It is assumed that the evaluation of the data extracts for transfers of data media (view creation) is possible on an existing SAP system in a group of companies, regardless of which company (legal entity) operates the SAP system on an individual basis. This right to evaluation should be contractually protected.

5. This case covers sales of companies in which the buyer also has an SAP system. In this case, the seller and buyer can agree that the data extracts will be handed over to the buyer, which can then evaluate the extracts in its own SAP system for auditing purposes.

### Table 4: Case Structure for System Shutdowns /System Decommissioning

<table>
<thead>
<tr>
<th>Case</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>If all electronic documents in a system to be shut down are transferred, it is unnecessary to retain the electronic documents from the legacy systems for the external auditor (provided that they can be evaluated with the same functional scope as the system that was shut down). The requirements of the auditor with regard to data access can also be satisfied by the IT system which has received the electronic documents.</td>
</tr>
<tr>
<td>3</td>
<td>It is not possible to access SAP data extracts of a source system from non-SAP systems. Either another SAP system must be kept to evaluate the data extracts or an extract splitter must be used (for example, due to Germany's country-wide data requirement for SAP systems) to provide the electronic documents in the extracts for subsequent evaluation by an evaluation tool before deactivating the SAP system.</td>
</tr>
<tr>
<td>4</td>
<td>It is assumed that the evaluation of the data extracts for transfers of data media (view creation) is possible on an existing SAP system in a group of companies, regardless of which company (legal entity) operates the SAP system on an individual basis. This right to evaluation should be contractually protected.</td>
</tr>
<tr>
<td>5</td>
<td>This case covers sales of companies in which the buyer also has an SAP system. In this case, the seller and buyer can agree that the data extracts will be handed over to the buyer, which can then evaluate the extracts in its own SAP system for auditing purposes.</td>
</tr>
</tbody>
</table>

#### 4.7.4.2 Accounting Relief According to Section 148 of AO

It is impossible to generally assess whether a request to the tax authorities in accordance with Section 148 of AO \(^{241}\) will be successful in obtaining relief from accounting obligations to the effect that only an extract of electronic documents has to be archived or migrated in cases where an IT system is shut down or migrated. This depends on the individual case at hand.

If the objective reasons are serious – for example, the high cost of retaining redundant legacy systems or the technical infeasibility (or considerable expense) of extracting data to an evaluation system solely for auditing purposes – then the chances of success are good. Unfortunately, we do not know of any definitive decision criteria whose fulfillment would necessarily result in relief from the data access requirements and the obligation to retain certain electronic documents in line with the GoBD/GDPdU. Submitting a written request comes with the risk that the request could be rejected, which would limit one's managerial decision-making powers.

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\(^{241}\) Cf. para. 143, last sentence of GoBD, loc. cit.
PRACTICAL TIP:

Depending on each individual case, it might be useful to already include the external auditor from the relevant tax authority at an early stage of any IT system transition or shutdown project.

We recommend that you speak with the auditor about the constraints in question and try to reach an agreement on which electronic documents will need to be provided in the context of future external audits.

4.8 EXTERNAL TAX AUDIT

4.8.1 AUDITOR’S WORKPLACE

The nature of a PC workstation meant for an auditor is different from that of an employee workstation. 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.

The auditor must be provided with a means of printing documents.

Thorough planning must thus be involved in setting up hardware and software for an auditor’s workstation.

Hardware requirements:

- No Internet access
- No open USB interface
- No CD, DVD, or disk drives.

These restrictions are intended to prevent electronic documents in the taxpayer’s IT system from being removed from the company without being noticed. Any request for electronic documents has to be processed in the manner officially established at the company and communicated to the auditor and the employees. Conversely, the auditor should be prevented from introducing files into the taxpayer’s network in any
arbitrary manner. The GoBD indirectly precludes auditors from uploading files from their computers to a taxpayer’s network\(^{244}\).

**Software Requirements:**

- No open USB interface (can be switched off by means of software, for example)

- No intranet access.
  An intranet represents an in-house access portal and usually provides access to the latest information. This information is replaced with newer versions, which is why the documents relating to the respective audit period can no longer be found there.
  For the audit period, relevant versions of documents should be provided in another manner by the taxpayer.

- SAP GUI is mandatory where SAP is used

- Possibly required:
  - Access to other programs with electronic documents which are of importance for taxation in upstream or downstream systems (for example, non-SAP systems)
  - PDF and possibly other viewers for file formats used
  - Office software (for example, spreadsheets and word processing)\(^{245}\)
    It has been observed in practice that posting documents created with word processing or spreadsheet programs are connected (linked) to the corresponding posting documents in an ERP system to simplify matters. The external auditor should have access to such links and the option to download the documents referenced.
    Furthermore, the external auditor can use a spreadsheet or word processing program for further processing of electronic SAP documents (for example) following an SAP download.

\(^{244}\) Cf. para. 174, last paragraph of GoBD, loc. cit.
\(^{245}\) Cf. Chapter 3.2.9.1.
4.8.2 ORGANIZATIONAL REQUIREMENTS

We recommend defining guidelines for working practice that stipulate binding regulations on the following subjects:

- Clear specification of one or more contacts for the external auditor. Only these individuals should be authorized to provide information verbally and in writing, create data media, or commission the creation of data media for the auditor. At the same time, the taxpayer’s employees should be directed to refer the auditor to the appointed contact person(s) for answers to direct questions.

- Handling the delivery of the electronic documents in the context of data media transfers (Z3):
  - Download from the company’s network or from the in-house PC client of the external auditor (Z1)\(^{246}\)
  - How many examples of data media are created with identical files to respond to an auditor's query?
    Example: 1 x auditor, 1 x accounting / tax department\(^{247}\)
  - Encryption with a corresponding decryption option without additional software on the part of fiscal authorities\(^{248}\) is recommended (see Section 4.8.3)
  - Transfer of a data medium from the corporate sphere only in coordination with the taxpayer\(^{249}\)
  - Documentation of the transfer of the data medium to the external auditor by means of a form
  - Monitoring of data medium return based on transfer documentation\(^{250}\).

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\(^{246}\) Cf. para. 167, last sentence of GoBD, loc. cit.
\(^{247}\) Cf. Chapter 4.6.4.
\(^{248}\) Cf. para. 176, last sentence of GoBD, loc. cit.
\(^{249}\) Cf. para. 168 of GoBD, loc. cit.
\(^{250}\) Cf. para. 169 of GoBD, loc. cit.
PRACTICAL TIP:

Prior to audits

- Clarify the internal responsibilities for taking care of the external auditor from a professional/fiscal and technical IT perspective
- Test the authorizations granted to the external auditor for Z1 access: How far does the Z1 access go?
- Test the organizational sequence for creating a data medium (Z3 access)
- Check whether all of the requested data has been made available on the data medium.

If you expect a large number of data media to be created for external audits, we recommend that you create a register with information as to which data medium with which content was provided on which date to the external auditor.

Based on this register, an overview can be obtained of the electronic documents which have been made available for the external audit. It also makes it possible to monitor the return of each data medium.

PRACTICAL TIP:

All data media should be reclaimed to help prevent them from falling into unauthorized hands.

4.8.3 DATA PROTECTION FOR DATA MEDIA

A data medium that is generated for the external auditor can contain highly sensitive operational data which the taxpayer would like to secure as well as possible. If electronic documents are imported into the external auditor’s own computer, they are well protected against unauthorized access by the computer’s encrypted hard disk. As such, a data medium constitutes a weakness in terms of data security. It can be moved easily or lost or stolen, either at the company between creation and delivery to the external auditor or within the sphere of influence of the external auditor.
In the view of the fiscal authorities and the Fiscal Court of Thuringia, external auditors may remove received data media from the business premises of the taxpayer to evaluate them further at their offices (for example) \(^{251}\). The external auditor may lose the delivered data medium in this manner. The GoBD recommends that external auditors coordinate the transfer of data media with the taxpayer \(^{252}\).

We recommend that you encrypt data media. It must be possible for the auditor to decrypt the data. Since auditors are not permitted to install a taxpayer’s software on their own computers, the only solution is to include the necessary decryption program on data media transferred to external auditors. It must be possible to execute the program directly on the data medium, as installing it on the auditor’s own computer is not permitted due to licensing (among other reasons). A self-extracting file could be an alternative here. The transferred files are to be protected by a password. The password is to be transmitted separately to the auditor \(^{253}\).

**PRACTICAL TIP:**

Should it become apparent that the external auditor will require electronic documents which are of importance for taxation on automatically evaluable data media (access type Z3), start discussing the procedure for transferring encrypted data with the auditor in advance of the external audit once you have received the audit directive.

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

In addition to the encryption of data media, there is another approach whereby the electronic documents on a data medium are imported immediately by the auditor on the premises of the company to be audited and the data medium is immediately returned (though it should still be retained at the company for any follow-up queries). This eliminates the need for encryption.

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\(^{252}\) Cf. para. 168, last sentence of GoBD, loc. cit.

\(^{253}\) Cf. para. 176, penultimate sentence of GoBD, loc. cit.
5. TECHNICAL IMPLEMENTATION IN SAP SYSTEMS

This version is based on the available functions in SAP Business Suite (ECC 6.00 and higher). For earlier versions, please refer to the information in version 3.02 of the DSAG recommendation dated January 8, 2010.

5.1 SAP SYSTEMS

Z1 – Z3 solutions for SAP Business One can be found in Chapter 5.11 and for SAP Business ByDesign in Chapter 5.12.

SAP provides DART functionality for Z3 access for SAP Business Suite 6.0 (ECC 6.00) and later releases. A role concept with additional functions is available for Z1/Z2 access.

5.2 FUNCTIONAL ENHANCEMENTS FOR DART FROM THIRD PARTIES

The GoBD/GDPdU tools available on the market will need to be developed further on an ongoing basis due to:

- The individual system landscape and its various forms
- The complexity of the subject
- The continuous further development of:
  - Systems
  - Content-related requirements

On the whole, the solutions available on the market for GoBD/GDPdU functions within or outside the SAP system are all to be understood as solutions designed to provide data access in an economically viable manner.

The effectiveness and functionality of each tool and solution depends, among other things, on:

- Costs
- Industry requirements
● Requirements due to the company size
● The requirements of (developed) system landscapes

Such decisions are left to the discretion of each individual taxpayer.

WG Data Access is of the opinion that the legal requirements of the standard SAP system can be met with the currently available data scope and functionality.

5.3 DART: FIELD CATALOG OF TAX-RELEVANT DATA

As of release 6.00, SAP systems that do not include the HCM (Human Capital Management) module contain a catalog of tables/table fields (also known as a field catalog).  

It results from the fields qualified as tax-relevant by WG Data Access and continues to be developed based on recurrent discussions with the fiscal authorities and practical research by companies involved in the WG. This catalog forms the starting point for company-specific reviews of data that may be tax-relevant in the SAP systems at hand.

We maintain close contact with SAP to rapidly implement the updates it makes to the data catalog in SAP systems.

Here, we would like to stress the fact that all taxpayers have to adapt the DSAG field catalog to the specifics of their company or industry.

5.4 TECHNICAL Z1/Z2 ACCESS

SAP generally enables read-only access which is restricted to the audit period.

In the case of a heterogeneous system landscape with SAP and non-SAP systems, however, it may not be possible to implement this at all, or only at great expense in some cases. We recommend that you deal intensively with the subject of data access, as access granted intentionally or unintentionally to the external auditor to non-tax-relevant data is not subject to any provisions precluding the utilization of any knowledge gained as a result.

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254 Cf. Chapter 5.8.2 on HCM.
255 See SAP transaction FTWCS, Chapter 5.5.6.
256 Cf. SAP Note 582583 – DART – version maintenance.
257 Cf. Chapter 5.5.7.
Taxpayers are responsible for structuring their systems in such a manner that read/write access is separate from read-only access and tax-relevant data is separate from non-tax-relevant data (for example, for cases involving the professional duty of confidentiality due to legal requirements). If this is not done, the tax auditor cannot be denied access to the data 258.

Evaluations in SAP, which are available to the external auditors in accordance with GoBD, are performed via programs which are sometimes assigned to more than one transaction. This is due in part to the fact that different selections are predefined for users to optimize their daily work.

During audits, the external auditor may thus request transactions which are not assigned to the standard auditor roles. However, the same evaluation can then be called via another transaction that is already included in the auditor roles.

All transactions result in the same objective; differences can occur only at the results level if more data is also displayed one way or another. These approaches and views were factored into the development of the auditor roles for SAP systems.

WG Data Access has decided to give priority to those functions which allow for tax-relevant differentiation and read-only access while effectively checking the period at hand.

In our opinion, this means that the following critical transactions:

- SE16/SE16N and
- SE16 derivatives Data browser (displays table contents)
- SE17 General table display
- SA38 ABAP/4 reporting (direct calls for programs/reports)

cannot be used by external auditors.

Transactions SE16, SE16N, SE16 derivatives, and SE17 can be used for table evaluations which render the taxpayer’s classifications with regard to tax relevance invalid. For example, the external auditor could see all company-code-specific data in the table <table name> without the user role restriction to company code <company code number> taking effect. This would exceed the scope of the audit as specified in the corresponding audit directive.

258 Cf. the BFH decision dated September 26, 2007; ref.: I B 53,54 / 07 loc. cit., as well as the decision of the Fiscal Court of Rhineland-Palatinate dated January 20, 2005; ref. 4 K 2167/04, https://dejure.org/2005,4177.
To give the external auditor an overview of the customer developments available in a given customer system, the DSAG (in cooperation with SAP) has developed the Customer Object Administration Tool (COAT) \(^{259}\). This tool enables the determination and classification of all customer developments (for example, tables, appends, and programs integrated into the customer system in question). For more information on COAT, see Chapter 5.6.

Transaction SA38 displays the number of programs or reports in the system and provides the option to execute them without differentiating between activated or deactivated programs/reports, whether or not they are tax-relevant, or whether they permit an update function \(^{260}\) or a display-only function.

Access requests by external auditors for Z1/Z2 access cannot be granted via the aforementioned critical transactions.

**PRACTICAL TIP:**

Insofar as a system contains tax-relevant evaluations to which the tax auditor should receive access, these evaluations are to be assigned to Z transactions which are then to be included in the auditor role.

### 5.4.1 SAMPLE AUTHORIZATION ROLES FOR EXTERNAL AUDITORS

The scope of authorizations developed by WG Data Access was converted into authorization roles \(^{261}\), which are in line with the scope of the data catalog \(^{262}\). You can use transaction PFCG in SAP Business Suite 6.00 and later to find all defined sample auditor roles under the generic name SAP_AUDITOR_TAX*. These sample auditor roles can be seen as proposals for organizing authorizations at each individual company and should thus not be used without critically examining the content and developing it for the specific field of application at hand.

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\(^{259}\) Cf. Chapter 5.6.

\(^{260}\) Leads to changes in data.

\(^{261}\) Cf. SAP Note 445148 – Access by tax authorities to stored data – with references to other SAP Notes.

\(^{262}\) Cf. Chapter 5.5.6.
PRACTICAL TIP:

SAP Note 445148\textsuperscript{261} is available as a main starting point for Z1/Z2 access. This note is updated by SAP when necessary.

We recommend that you read the note again (at the latest before an upcoming external audit) and adopt any necessary new enhancements in your own systems.
Currently, the following roles are included in the SAP standard:

<table>
<thead>
<tr>
<th>Role Name</th>
<th>Short Role Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP_AUDITOR_TAX_A</td>
<td>AIS - Tax Audit, Central Authorizations (Authorization)</td>
</tr>
<tr>
<td>SAP_AUDITOR_TAX_AA</td>
<td>AIS - Tax Audit, Asset Accounting</td>
</tr>
<tr>
<td>SAP_AUDITOR_TAX_AA_A</td>
<td>AIS - Tax Audit Asset Accounting (Authorization)</td>
</tr>
<tr>
<td>SAP_AUDITOR_TAX_CML</td>
<td>AIS - Steuerprüfung CML</td>
</tr>
<tr>
<td>SAP_AUDITOR_TAX_CML_A</td>
<td>AIS - Tax Audit CML (Authorization)</td>
</tr>
<tr>
<td>SAP_AUDITOR_TAX_CO</td>
<td>AIS - Tax Audit: Controlling</td>
</tr>
<tr>
<td>SAP_AUDITOR_TAX_CO_A</td>
<td>AIS - Tax Audit: Controlling (Authorization)</td>
</tr>
<tr>
<td>SAP_AUDITOR_TAX_COPS</td>
<td>AIS - Tax Audit, Controlling / Project System</td>
</tr>
<tr>
<td>SAP_AUDITOR_TAX_COPS_A</td>
<td>AIS - Tax Audit Controlling/Project System (Authorization)</td>
</tr>
<tr>
<td>SAP_AUDITOR_TAX_DART</td>
<td>AIS - Tax Audit DART</td>
</tr>
<tr>
<td>SAP_AUDITOR_TAX_DART_A</td>
<td>AIS - Tax Audit DART (Authorization)</td>
</tr>
<tr>
<td>SAP_AUDITOR_TAX_FI</td>
<td>AIS - Tax Audit, Financials</td>
</tr>
<tr>
<td>SAP_AUDITOR_TAX_FI_A</td>
<td>AIS - Tax Audit Financial Accounting (Authorization)</td>
</tr>
<tr>
<td>SAP_AUDITOR_TAX_FITV</td>
<td>AIS - Tax Audit Travel Expenses</td>
</tr>
<tr>
<td>SAP_AUDITOR_TAX_FITV_A</td>
<td>AIS - Tax Audit Travel Expenses (Authorizations)</td>
</tr>
<tr>
<td>SAP_AUDITOR_TAX_GDPDU</td>
<td>AIS - Tax Audit GDPDU</td>
</tr>
<tr>
<td>SAP_AUDITOR_TAX_GDPDU_A</td>
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Figure 7: Auditor Roles: Overview of the Sample Roles for Tax Auditors

SAP_AUDITOR_TAX_*

Note:
The role indicated in Figure 7 SAP_AUDITOR_TAX_COPS has since been split into the roles SAP_AUDITOR_TAX_CO and SAP_AUDITOR_TAX_PS. The composite role SAP_AUDITOR_TAX was adjusted accordingly.

---

263 The role SAP_AUDITOR_TAX_COPS still exists to provide backward compatibility, but it is no longer maintained.
Information on the role for Financial Accounting (FI):

- **Access rights for the cash journal**
  Transactions for the cash journal are included in the FI roles in the context of role enhancements (see Chapter 5.4.3).

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

  As the system configuration of a special ledger always has to satisfy the needs of the specific taxpayer, there cannot be any general template for a sample role. On a case-by-case basis, taxpayers can create information rights for external auditors in connection with special ledgers according to their own circumstances and bundle them into a customized auditor role 264.

For the sake of clarity in illustrating which transactions are assigned to the user master of the external auditor, it is necessary for a copy of the composite role SAP_AUDITOR_TAX to be assigned in addition to the individual roles.

If the composite role is not assigned, the tax auditor may have asked to load his or her own favorites into his or her user menu (a standard SAP function) to structure the transactions. From the perspective of WG Data Access, there can be no objection to this request because it involves only a visual representation and has no effect on the actual authorizations granted.

---

264 Cf. Chapter 5.4.3.
The following figure shows the role menu of the sample role SAP_AUDITOR_TAX_FI for the FI module at the top menu level.

Figure 8: Auditor Roles: Breakdown of the Sample Auditor Role for Finance

Based on discussions with the fiscal authorities in 2013 – 2015, WG Data Access has requested an enhancement of the aforementioned roles from SAP.
SAP has delivered the requested enhancements of the transaction scope via SAP Notes. The following table shows the new transactions that have been inserted into the sample roles:

<table>
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<th>Role SAP/ AUDITOR_ TAX_</th>
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265 Cf. SAP Note 2212390 – DART: Enhancement to Z1 access and auditor roles.
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<td>S_ALR_87014612</td>
<td>Lease-Outs: Standard Analysis</td>
<td>266</td>
</tr>
<tr>
<td>RE-FX</td>
<td>S_ALR_87014792</td>
<td>Posting Log for SCS</td>
<td>267</td>
</tr>
<tr>
<td>RE-FX</td>
<td>S_P99_41000029</td>
<td>Reporting Rental Units</td>
<td>268</td>
</tr>
<tr>
<td>RE-FX</td>
<td>FO_FVVI_BUKRS</td>
<td>Basic Settings for RE Company Codes</td>
<td>266</td>
</tr>
<tr>
<td>RE-FX</td>
<td>FO_V_TIV65</td>
<td>Non-Deductible Input Tax Accounts</td>
<td>267</td>
</tr>
</tbody>
</table>

266 Cf. SAP Note 2267794 – AIS - roles for GDPdU in RE-FX.
267 Cf. SAP Note 2269076 – AIS - enhancement of the authorization check for STSenkG in RE-FX.
268 Cf. SAP Note 2289254 – AIS - roles for GDPdU in RE.
### Table 5: Auditor Roles: Delivered Enhancements

The transactions listed below will be delivered:

<table>
<thead>
<tr>
<th>Role SAP_AUDITOR_TAX_</th>
<th>Transactions</th>
<th>Description</th>
<th>SAP Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD</td>
<td>MCTA</td>
<td>SIS: Customer Analysis – Selection</td>
<td></td>
</tr>
<tr>
<td>SD_A</td>
<td>MCTC</td>
<td>SIS: Material Analysis – Selection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MCTE</td>
<td>SIS: Sales Org. Analysis Selection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MCTK</td>
<td>SIS: Shipping Pt. Analysis Selection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MCV5</td>
<td>Call Up Price List w. Stepped Display</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_P6B_12000142</td>
<td>Change Documents for Conditions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_P6B_12000143</td>
<td>Display Change Documents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_P6B_12000144</td>
<td>Display Change Documents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_P6B_12000145</td>
<td>Display Change Documents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>V.26</td>
<td>Selection by Object Status</td>
<td></td>
</tr>
<tr>
<td></td>
<td>V/LD</td>
<td>Create Net Price List</td>
<td></td>
</tr>
<tr>
<td></td>
<td>V_NL</td>
<td>Execute pricing report</td>
<td></td>
</tr>
<tr>
<td></td>
<td>V23</td>
<td>Sales Documents Blocked for Billing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>VA23</td>
<td>Display Quotation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>VA25</td>
<td>Quotations List</td>
<td></td>
</tr>
<tr>
<td></td>
<td>VA33</td>
<td>Display Scheduling Agreements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>VA35</td>
<td>List of Scheduling Agreements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>VA43</td>
<td>Display Contracts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>VA45</td>
<td>List of Contracts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>VB(8)</td>
<td>List Rebate Agreements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>VF23</td>
<td>List of Invoice Lists</td>
<td></td>
</tr>
<tr>
<td></td>
<td>VF25</td>
<td>Create Net Price List</td>
<td></td>
</tr>
</tbody>
</table>

269 Cf. SAP Note 2289271 – AIS - enhancement of the authorization check for STSenkG in RE.
<table>
<thead>
<tr>
<th>Role SAP_AUDITOR_TAX_</th>
<th>Transactions</th>
<th>Description</th>
<th>SAP Note</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S_AHR_61015785</td>
<td>Infotype Overview for Employee</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_AHR_61015788</td>
<td>Payments and Deductions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_AHR_61015789</td>
<td>Bank Details</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_AHR_61015798</td>
<td>Overview of Company Loans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_AHR_61015800</td>
<td>Account Statement for Company Loans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_AHR_61016266</td>
<td>Display and Maintain Infotypes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_AHR_61016362</td>
<td>Flexible Employee Data</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_AHR_61016369</td>
<td>Employee List</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_AHR_61016370</td>
<td>Overview of Maternity Data</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_ALR_87014056</td>
<td>HR Master Data Sheet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_ALR_87014061</td>
<td>Flexible Employee Data</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_ALR_87014064</td>
<td>Who’s Who</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_ALR_87014135</td>
<td>Wage Type Distribution</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_ALR_87101320</td>
<td>Display Infotype Definitions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_ALR_87101324</td>
<td>Infotypes and Subtypes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_ALR_87101326</td>
<td>Directory of Personnel Calctn Rules</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_PH9_46000216</td>
<td>Service Anniversaries</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_PH9_46000220</td>
<td>Vehicle Search List</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_PH9_46000221</td>
<td>Birthday List</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_PH9_46000222</td>
<td>Family Members</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S_PH9_46000223</td>
<td>EEs Who Entered And/Or Left Company</td>
<td></td>
</tr>
</tbody>
</table>

Table 6: Auditor Roles: Planned Extension

In addition, the following transactions are also to be regarded as tax-relevant. Since they are not used in every installation, however, they are to be added in a customized manner if necessary:

<table>
<thead>
<tr>
<th>Module</th>
<th>Transactions</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FI</td>
<td>FDK43</td>
<td>Credit Management - Master Data List</td>
</tr>
<tr>
<td>FI</td>
<td>S_ALR_87012218</td>
<td>Credit Master Sheet</td>
</tr>
<tr>
<td>CO</td>
<td>1KE1</td>
<td>EC-PCA: Analyze Settings</td>
</tr>
<tr>
<td>CO</td>
<td>2KEE</td>
<td>Profit Center: Totals Records</td>
</tr>
<tr>
<td>CO</td>
<td>GC9S</td>
<td>Reconciliation of Total Line Items</td>
</tr>
<tr>
<td>CO</td>
<td>GCS6</td>
<td>Global Standard Accounts</td>
</tr>
<tr>
<td>CO</td>
<td>KAL7</td>
<td>Overview of Cost Flows</td>
</tr>
<tr>
<td>CO</td>
<td>KCH3</td>
<td>Display profit center hierarchy</td>
</tr>
<tr>
<td>CO</td>
<td>KCH6N</td>
<td>EC-PCA: Display Standard Hierarchy</td>
</tr>
<tr>
<td>CO</td>
<td>KDH3</td>
<td>Display Account Group</td>
</tr>
<tr>
<td>CO</td>
<td>KE30</td>
<td>Execute profitability report</td>
</tr>
<tr>
<td>CO</td>
<td>KE53</td>
<td>Display Profit Center</td>
</tr>
<tr>
<td>CO</td>
<td>KE5T</td>
<td>Compare G/L Accounts FI &lt;-&gt; EC-PCA</td>
</tr>
<tr>
<td>CO</td>
<td>KE80</td>
<td>EC-PCA: Execute Drill-Down Report</td>
</tr>
<tr>
<td>CO</td>
<td>KEAT</td>
<td>Reconcile CO-PA &lt;-&gt; SD &lt;-&gt; FI</td>
</tr>
</tbody>
</table>
Table 7: Auditor Roles: Other Individual Tax-Related Transactions

5.4.2 DART ACCESS FOR EXTERNAL AUDITORS (Z1/Z2)

The fiscal authorities prefer direct Z1/Z2 access to the respective system. If the relevant system should have been shut down, Z1/Z2 access to data extracts is to be granted as a minimum requirement. For this purpose, the data extracts are to be transferred from the source system to an SAP system running the same or a later release.

The following roles were developed to provide Z1/Z2 access to data extracts that were generated with DART without having to restrict access to online datasets.

Two individual roles have been developed which adopt information functions from the DART menu and the transaction and report authorizations from the DART tool:
SAP_AUDITOR_TAX_DART  
AIS Tax Audit DART  
= User menu without authorizations

SAP_AUDITOR_TAX_DART_A  
AIS Tax Audit DART (Authorization)  
= Authorizations without a user menu.

The following figure shows the breakdown of the role menu for the sample role SAP_AUDITOR_TAX_DART.

![Role Menu for Steuerprüfer](image)

**Figure 9:** Auditor Roles: Breakdown of Role of AIS Tax Auditor DART

The functions included in the sample role SAP_AUDITOR_TAX_DART are designed to provide read-only access to DART data extracts. Their use requires the authorization roles to have a precise form.

In individual cases, the taxpayer has to decide whether and to what extent DART authorizations are to be granted to an external auditor by means of read-only access.
The following overview is intended to serve as an example of a possible distribution of tasks between the taxpayer and the auditor:

<table>
<thead>
<tr>
<th>Task</th>
<th>Task Assigned to ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create DART extracts</td>
<td>no</td>
</tr>
<tr>
<td>Display DART extracts (DART browser)</td>
<td>possible</td>
</tr>
<tr>
<td>Create view definition</td>
<td>no</td>
</tr>
<tr>
<td>Create view files</td>
<td>no</td>
</tr>
<tr>
<td>Display view files (View log displays with access to view data)</td>
<td>possible</td>
</tr>
</tbody>
</table>

Table 8: Auditor Roles: Distribution of Z1/Z2 Access Rights on DART

The role SAP_AUDITOR_TAX_DART_AIS Tax Audit DART (Authorization) contains the following transactions for access to DART extracts:

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTWF</td>
<td>Data extract browser</td>
</tr>
<tr>
<td>FTWH</td>
<td>Data view queries</td>
</tr>
<tr>
<td>FTWCS</td>
<td>Segment catalog</td>
</tr>
<tr>
<td>FTWCF</td>
<td>Field catalog</td>
</tr>
<tr>
<td>FTWN</td>
<td>Display view query log</td>
</tr>
<tr>
<td>FTWD</td>
<td>Verify data extract checksums</td>
</tr>
<tr>
<td>FTWY</td>
<td>Maintain data file view</td>
</tr>
<tr>
<td>FTWAD</td>
<td>Associated data detector</td>
</tr>
</tbody>
</table>

Table 9: Auditor Roles: Transaction Scope of the Auditor Role for DART

5.4.3 COMPANY-SPECIFIC AUDITOR ROLES

To define individual auditor roles, we suggest that you copy the SAP sample auditor roles to your own namespace, add customized forms to the authorizations for transactions and reports, and also add authorizations for organizational units, account groups for customer accounts/vendor accounts/general ledger accounts, chart of accounts, etc. Changes to the sample auditor roles when implementing SAP Notes or importing support packages do not necessarily have an impact on the auditor's rights in the taxpayer’s system.
To include customized transactions, you should create your own role; see information on this subject under 5.4.4.

In the following example, the proposed roles were copied:

```
From SAP_AUDITOR_TAX*
To Z_AUDITOR_TAX*
```

"Z" stands for an optional name chosen by the taxpayer in connection with customer namespaces.

<table>
<thead>
<tr>
<th>Transaction Roles (Module-Specific Menus)</th>
<th>Composite Roles Z_AUDITOR_TAX</th>
<th>Authorization Roles (Module-Specific Authorizations Without Menus)</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z_AUDITOR_TAX_A</td>
<td></td>
<td>Central authorizations for devices, spooler, etc.</td>
<td></td>
</tr>
<tr>
<td>Z_AUDITOR_TAX_FI</td>
<td>Z_AUDITOR_TAX_FI_A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z_AUDITOR_TAX_MM</td>
<td>Z_AUDITOR_TAX_MM_A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>etc.</td>
<td>etc.</td>
<td>Proposed roles for other modules</td>
<td></td>
</tr>
<tr>
<td>Z_AUDITOR_TAX_FI_Z</td>
<td>Z_AUDITOR_TAX_FI_Z_A</td>
<td>Roles for customized enhancements, see Section 5.4.4</td>
<td></td>
</tr>
<tr>
<td>etc.</td>
<td>etc.</td>
<td>Additional customized roles for other modules</td>
<td></td>
</tr>
</tbody>
</table>

Table 10: Auditor Roles: Overview of Customized Naming Conventions

If support packages are imported, we recommend comparing SAP’s proposed roles with the customized roles in order to determine changes as a starting point in maintaining customized auditor roles. Here, SAP provides two different types of functions to compare standard SAP/DSAG roles with a company’s customized versions.

- In the User Information System (transaction SUIM), transaction S_BCE_68001777 (report RSUSR050) is available for this purpose. The two roles to be compared are entered in the input fields for "Role A" and "Role B".

---

In addition to the Z/Y transactions, this also includes partner/customer namespaces which start with a forward slash (/).
Transaction PFCG (Role Maintenance) provides a tool for role comparison. Alternatively, you can call transaction ROLE_CMP directly.

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

Accessing role comparison via the menu path in transaction PFCG: Utilities → Role Menu Comparison.
Results list of the role comparison:

Current SAP Notes that update the scope of auditor rights to Z1/Z2 access are to be manually included in the company roles if necessary.

**PRACTICAL TIP:**

Ideally, company-related roles are created as a copy based on the composite role SAP_AUDITOR_TAX. Here, the individual roles are selectively copied and entered into the new role. These roles are then to be developed accordingly.

The user master of the external auditor's user is then assigned the Z composite role, which automatically contains the dependent individual roles.

This approach also ensures that the user menu of the auditor will remain structured according to modules and areas.
5.4.4 AUDITOR ROLES FOR CUSTOMER DEVELOPMENTS

SAP sample auditor menu roles and SAP sample auditor transaction roles should not be changed because there is a risk of overwriting customized changes when importing SAP Notes or support packages. In the case of customer developments, we recommend that you define your own supplementary roles for the specific module at hand.

A company’s own transaction authorizations can be included in customized supplementary roles, for example (as in the case of authorization to download SAP evaluations in a separate network directory for the external auditor).

In accordance with the BMF statement dated July 16, 2001 (GDPdU) / November 14, 2014 (GoBD), all "evaluation options available in the system" should be provided for use by the external auditor. In our opinion, access is restricted to transactions that are actually running and used by the taxpayer because the taxpayer must be able to assess at any time the information rights granted to the external auditor. The taxpayer cannot render any such assessment in the case of unused software functions.

The auditor must also be able to access customer developments of transactions with read-only access. These individual evaluations can surpass standard evaluations in terms of their functionality. If these customer developments access select logical databases (DDF for Customers, KDF for Vendors, SDF for G/L Accounts, etc.), period checking also applies to these transactions. The periodic restriction must be added individually to your own applications if their data was not collected via logical databases that contain the function module for period checking.

The following table shows a proposal for designing a naming convention for your own authorization roles for customer-specific enhancements.

---

271 Cf. Chapter 5.4.3.
272 Cf. the BMF statement on GDPdU dated July 16, 2001, Section I 2a, loc. cit.; the BMF FAQs dated January 22, 2009, Section III, question 12, loc. cit.; and the BMF statement on GoBD dated November 14, 2014, para. 165, loc. cit.
273 Cf. the information on COAT in Chapter 5.6.
274 Cf. Chapter 5.4.6.4.
275 Cf. Chapter 5.4.6.
SAP RECOMMENDATION FOR ACTION – RECOMMENDATIONS ON THE IMPLEMENTATION OF DATA ACCESS (GOBD/GDPDU) BY THE FISCAL AUTHORITIES VERSION 4.01

**Composite Roles**

<table>
<thead>
<tr>
<th>Transaction Roles (Module-Specific Menus)</th>
<th>Authorization Roles (Module-Specific Authorizations Without Menus)</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z_AUDITOR_TAX_FI_Z</td>
<td>Z_AUDITOR_TAX_FI_Z_A</td>
<td>Customized supplementary roles for FI module</td>
</tr>
<tr>
<td>Z_AUDITOR_TAX_MM_Z</td>
<td>Z_AUDITOR_TAX_MM_Z_A</td>
<td>Customized supplementary roles for MM module</td>
</tr>
<tr>
<td>etc.</td>
<td>etc.</td>
<td></td>
</tr>
</tbody>
</table>

Table 11: Auditor Roles: Proposal for Naming Convention – Customer Enhancement

5.4.5 **DISPLAYING USER MENU FOR AUDITOR ROLES**

External auditors are only to use the menu which the taxpayer has developed for them. To prevent external auditors from switching from the auditor menu to the standard SAP menu, the table:

**USERS_SSM**  Allowed menus for the Session Manager

... includes the option to maintain entries with the user name of the auditor and set the switch for the user menu.

5.4.6 **PERIOD CHECKING (AUDIT PERIOD)**

5.4.6.1 **Restricting Access Rights to a Period**

Before SAP systems were enhanced with data access functions, it was not possible to restrict the access authorization of a user to a specific period. This function, which was introduced while taking into account the applicable legal requirements, allows an access period for transaction data to be defined for the external auditor. For master data, access cannot be restricted to data records which were active (i.e. not blocked) in the audit period at hand. Access is also granted to items that arose in previous posting periods and are/were still open during the audit period.

The following table illustrates this context via examples.

---

277 Accompanied the GDPdU introduction on January 01, 2002 (Section 147, para. 6 of AO).
Table 12: Period Dependence: Examples of Data Access

<table>
<thead>
<tr>
<th>Data Object</th>
<th>Document Type</th>
<th>Document Date</th>
<th>Auditing Period</th>
<th>Auditor's Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master data</td>
<td>Customer master record</td>
<td>Created in FY 2005</td>
<td>FY 2014</td>
<td>Yes</td>
</tr>
<tr>
<td>Master data</td>
<td>Customer master record</td>
<td>Created in FY 2015</td>
<td>FY 2014</td>
<td>Yes</td>
</tr>
<tr>
<td>Transaction data (Account managed on an open item basis)</td>
<td>FI document</td>
<td>In FY 2005</td>
<td>FY 2014</td>
<td>Yes</td>
</tr>
<tr>
<td>Transaction data (Account not managed on an open item basis)</td>
<td>FI document</td>
<td>In FY 2007</td>
<td>FY 2014</td>
<td>No</td>
</tr>
</tbody>
</table>

In larger SAP systems with several company codes, several external auditors can be working in different company codes at the same time on (for example) VAT, personal income tax, and capital gains taxes. The period checking function was designed to be flexible enough that each auditor can be assigned different access periods when several audits are taking place at the same time.

The period specified by the audit directive in question is stored in the SAP system as the period under review.

The period checking function is controlled via several interacting tables which are maintained by means of three transactions. These transactions are presented below.

**PRACTICAL TIP:**

In the event of a timely external audit\(^\text{278}\), an agreement can be made in consultation with the external auditor that data access will be granted beyond the audit period up to the current fiscal year.

However, we recommend that you only grant this access up to the last closed accounting period of the current fiscal year for traceability reasons.

\(^{278}\) Cf. footnote 211 to Section 5 of the German tax audit regulations (version dated July 30, 2011).
5.4.6.2 **Transaction TPC2 (Tables TPCUSER/TPCUSERN)**

Transaction TPC2 is used to assign users (in this case, auditors) to DART user groups.

![Figure 14: Period Checking: Maintenance Dialog of Table TPCUSERN (Transaction TPC2)](image)

**PRACTICAL TIP:**

The user group can be freely defined and can represent an organizational unit or audit type (for example, capital gains tax audits, customs audits, or VAT audits).

5.4.6.3 **Table TPCPROGS**

The table:

TPCPROGS Check Table for Authorization Check Programs

... contains programs with period checking that were entered by SAP. Customer-specific programs which are not based on one of the listed programs have to be added to this table. Period checking must still be implemented in these customer-specific programs.

A special maintenance dialog does not exist. Maintenance is performed with transaction SM31.

---

The following figure shows an extract from table TPCPROGS.

Figure 15: Period Checking: Extract from Table TPCPROGS

5.4.6.4 Transaction TPC4 (Table TPCPROG)

Transaction TPC4 is used to enter programs or logical databases in table TPCPROG, which subjects them to extended checking within permitted periods. This table contains the programs and logical databases which the auditor uses for Z1/Z2 access. The scope of the table represents a subset of the programs used at a given company based on table TPCPROGS.

Figure 16: Period Checking: Extract from Table TPCPROG
5.4.6.5  Transaction TPC6 (Table TPCDATEN)

Transaction TPC6 defines the table:

**TPCDATEN** Periods for Authorization Check

... with the periods in which external auditors are permitted access. It identifies the user group in question (see Section 5.4.6.2) and assigns it an application (e.g. FI-FI = general ledger), an organizational unit (e.g. for FI: company code), and the permitted periods (date-to-date intervals).

![Figure 17: Period Checking: Extract from Table TPCDATEN](image)

The organizational unit must be entered in a context-dependent manner. The following table shows each possible organizational unit for the application:

<table>
<thead>
<tr>
<th>Application</th>
<th>Description</th>
<th>Table TPCDATEN: Organizational Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>Controlling</td>
<td>Controlling Area</td>
</tr>
<tr>
<td>CO-ACT</td>
<td>CO: Reposting Documents</td>
<td>Controlling Area</td>
</tr>
<tr>
<td>CO-ML</td>
<td>Material Ledger</td>
<td>Company Code</td>
</tr>
<tr>
<td>CO-O PA</td>
<td>Controlling: Orders</td>
<td>Company Code</td>
</tr>
<tr>
<td>EA-TRV</td>
<td>Travel Management Extension</td>
<td>Company Code</td>
</tr>
<tr>
<td>FI-AA</td>
<td>Asset Accounting</td>
<td>Company Code</td>
</tr>
<tr>
<td>FI-CA</td>
<td>Contract Accounts Receivable and Payable</td>
<td>Company Code</td>
</tr>
<tr>
<td>FI-FI</td>
<td>Financial Accounting</td>
<td>Company Code</td>
</tr>
<tr>
<td>HR</td>
<td>Human Resources</td>
<td>&lt;No organizational unit&gt;</td>
</tr>
</tbody>
</table>
### Application Description

<table>
<thead>
<tr>
<th>Application</th>
<th>Description</th>
<th>Table TPCDATEN: Organizational Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM-RE</td>
<td>Real Estate</td>
<td>Company Code</td>
</tr>
<tr>
<td>KE</td>
<td>CO-PA</td>
<td>Company Code</td>
</tr>
<tr>
<td>LE-WM</td>
<td>Warehouse Management</td>
<td>Company Code</td>
</tr>
<tr>
<td>LO-MD</td>
<td>Logistics Material Master</td>
<td>&lt;No organizational unit&gt;</td>
</tr>
<tr>
<td>MM-BSV</td>
<td>Balance Sheet Valuation</td>
<td>Company Code</td>
</tr>
<tr>
<td>MM-FT</td>
<td>Foreign Trade Import Processing</td>
<td>Company Code</td>
</tr>
<tr>
<td>PS-REP</td>
<td>Project System</td>
<td>Controlling Area</td>
</tr>
<tr>
<td>SD</td>
<td>Sales</td>
<td>Sales Organization</td>
</tr>
<tr>
<td>SD-FT</td>
<td>Foreign Trade Export Processing</td>
<td>Sales Organization</td>
</tr>
<tr>
<td>TR-LO</td>
<td>Treasury Loans</td>
<td>Company Code</td>
</tr>
<tr>
<td>TR-TM</td>
<td>Treasury Transaction Management</td>
<td>Company Code</td>
</tr>
</tbody>
</table>

**Table 13: Period Dependence: Transaction TPC6: Context-Specific Organizational Unit**

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

**Note:**

The restrictions on access to data in the SAP module MM (materials management, programs RM07*, RM08*) are not treated in this specific table; they are authorized via the FI-FI application.

### 5.4.7 RECORD AUDITOR ACTIVITIES (ACTION LOG)

#### 5.4.7.1 Action Log as a Function

The logging tools available in SAP systems prior to the GDPdU 280 (for example, transactions SM19 and SM20 (Security Audit Logs) or the SQL Audit Log 281) are purely technical in their orientation. For employees of specialist departments (for example, tax professionals), they are difficult to read and do not contain the desired detailed information on the Z1/Z2 auditor activities executed in the system.

The action log records all call parameters of transactions and presents them in an easily understandable form in an overview of the auditor activities at hand. The log data is saved under the data object ATAX.

Extensive data collections may result depending on the depth of the auditor’s access.

---

280 GDPdU introduction on January 1, 2002 (Section 147, para. 6 of AO).
281 Cf. SAP Note 115224 – SQL Audit.
PRACTICAL TIP:

The action log should be evaluated by the relevant specialist department and IT personnel at short intervals. There is not much sense in viewing the log data only shortly before the final discussion.

In this way, you can obtain up-to-date information on the actions of the auditor and the main areas he/she inspected.

The recording function for auditor access is only available for the applications FI, FI-AA, MM, and HCM. SAP does not plan to add a similar enhancement to the modules SD or CO.

5.4.7.2 Evaluation of the Action Log (Transaction SLG1)

All instances of auditor access are logged under object ATAX. Transaction SLG1 permits selective access to the log data.
The following figure shows the selection screen for transaction SLG1.

![Selection Screen for Transaction SLG1](image)

**Figure 18:** Evaluation of Auditor’s Access: Selection Screen for Transaction SLG1

Some important definition criteria include:

- The entry date and time of the auditor’s access
- The user name (separating evaluations by the respective auditors)
- The transaction code or program called by the auditor
In accordance with the selected selection parameters (in the example: transaction FBL3N and input date from 01/06/2016 to 30/06/2016), the list output is displayed on the screen:

![Display logs](image)

**Figure 19:** Evaluation of Auditor's Access: Displaying Results in Transaction SLG1

Expanding the individual lines by clicking the triangle at the left of the line displays additional access details. In the example here, the first line (see selection in Figure 19) has been queried.

![Display logs](expanded)

**Figure 20:** Evaluation of Auditor's Access: Displaying Details (Transaction SLG1)

Result of query:
Company code: 1000
G/L account: 95000
5.4.7.3 Display Log Overview (with Report CA_TAXLOG)

If the logs are to be archived as a print list, report CA_TAXLOG is available for this purpose. It displays the same content as transaction SLG1, but in another format.

![Tax-Relevant Data Accesses](image)

Figure 21: Evaluation of Auditor’s Access: Selection Screen of Report CA_TAXLOG (Transaction SA38)

Using the same selection criteria as for transaction SLG1 results in the following:

![Tax-Relevant Data Accesses](image)

Figure 22: Evaluation of Auditor’s Access: Displaying Details of Report CA_TAXLOG

After expanding the complete list, you can obtain a quicker overview with this format than with transaction SLG1 and also search for relevant terms.
5.4.7.4 Delete Log Information (Transaction SLG2)

The action log (data of object ATAX) can be deleted via transaction SLG2 upon completion of an audit.

Prior archiving is also possible using archiving object BC_SBAL.

**PRACTICAL TIP:**

If logging produces larger amounts of data (such as when multiple external auditors work for an extended period), we recommend archiving and reorganizing the logs to relieve the online database at hand and maintain an overview of the entire audit process.

5.5 DART: TECHNICAL Z3 ACCESS

5.5.1 DART DATA RETENTION TOOL

SAP provides the:

Data Retention Tool (DART)

... in its standard offerings. DART was originally developed for data access by the fiscal authorities in the United States. The classification of the tax-relevant data in the U.S. (table size of "US" segment catalog) is thanks to the initiative of the American SAP Users' Group (ASUG).

On this basis, WG Data Access has worked continually since 2001 to transfer the requirements of German legislation into the tool and build up its own catalog with tax-relevant data. The table size of the "DE" segment catalog now maps a large part of the core of the "US" data, and it also has additional data fields that meet the specific requirements of the German fiscal authorities (for example, for VAT registration numbers, or UStID).

Based on DART Version 2.8, the following table displays the relationship between the table lists for the US and DE versions.
### Table 14: DART: Segment Scope of Data Catalog – as of DART Version 2.8

<table>
<thead>
<tr>
<th>Data Scope</th>
<th>Data Segments</th>
<th>Fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>561</td>
<td>6,134</td>
</tr>
<tr>
<td>Thereof:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US (exclusively)</td>
<td>5</td>
<td>138</td>
</tr>
<tr>
<td>DE (exclusively)</td>
<td>386</td>
<td>3,726</td>
</tr>
<tr>
<td>US and DE together</td>
<td>170</td>
<td>2,270</td>
</tr>
</tbody>
</table>

Since the demand for data media transfers has intensified in other countries, as well (particularly in the EU), and legal regulations such as:

- Switzerland: Regulation of the Swiss Federal Department of Finance (EFD) on electronically transmitted data and information (ELDI-V) dated December 14, 2009
- Austria: Sections 131, 132 of Bundesabgabenordnung (BAO = Austrian Federal Fiscal Code)
- Luxembourg: Article 70 of the country’s VAT law, along with administrative instruction nº 742, dated April 7, 2009

... have been introduced, the resulting impact on the design and configuration of the relevant data tables continues to be seen.

Individual company codes can be configured for country-specific versions. It is possible to select a "US" or "DE" version within customizing. Only a small number of data tables (e.g. sales / use tax) are purely American. For German subsidiaries in the US, it is also possible as of release 2.4 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 requirements.

---

282 The SAP solution that was available in the period 2008-2014 was based on DART extracts and the incorporation of further information from the live database at hand.
283 The solution which has been available since the start of 2014 (FIEU_SAFT) extracts data from an SAP database, but is no longer based on DART extracts.
284 The solution (also FIEU_SAFT) has been available since the start of 2014 and does not use any DART extracts.
For this purpose, transaction FTWSCC (table TXW_C_BUKRS) must be used to maintain the assignment of company codes to a template:

![Customizing: Displaying Templates for Company Codes (Transaction FTWSCC)](image)

DART generates data extracts as "preserved fiscal data". A DART extract is a set of files which maps the state of the SAP database as a snapshot at the time of extraction. Database states can thus be "frozen" in their original state in the event of retroactive system changes (for example, for changes in charts of accounts, EURO conversions, or other SLO scenarios).

Evaluating DART extracts requires "one" SAP ERP system, which does not necessarily have to be identical to the source system in which the data extracts were once generated. However, this "evaluation" system needs to be running a release which is the same or later than that of the generating system. Large companies with different SAP systems and releases can conceivably generate DART data extracts locally and evaluate them in a central system.

As an alternative in the event that no SAP system is available to evaluate DART extracts at a later point in time (such as in the case of migrations from an SAP to a non-SAP system; see Section 4.7.4), the extract splitter is available in DART 2.4 and later. This function enables you to split extract files into the individual segments and generate one single file in the SAP audit format (with descriptive headers) for each segment. These individual files can be imported into an evaluation tool.

---

285 Changes to charts of accounts in the course of business mergers and acquisitions.
5.5.2 DELIVERY OF DART VERSIONS

The individual DART versions, starting with version 2.5\textsuperscript{286}, were and will be delivered with SAP Notes, which are usually imported into the systems via support packages.

The following table shows the numbers of the support packages (\(\checkmark\) = already included in the delivery version of the release) in which each DART version was delivered.

<table>
<thead>
<tr>
<th>DART Release</th>
<th>2.5</th>
<th>2.6</th>
<th>2.6e</th>
<th>2.7</th>
<th>2.7e\textsuperscript{287}</th>
<th>2.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP Note</td>
<td>1050841</td>
<td>1173540</td>
<td>1419580</td>
<td>1511234</td>
<td>1993990</td>
<td>2239257</td>
</tr>
</tbody>
</table>

| SAP_APPL 6.00 | 10/11 | 14 | 17 | 20 | 28 | 28 |
| SAP_APPL 6.02 | \(\checkmark\) | 4 | 7 | 10 | 18 | 18 |
| SAP_APPL 6.03 | \(\checkmark\) | 3 | 6 | 9 | 17 | 17 |
| SAP_APPL 6.04 | \(\checkmark\) | \(\checkmark\) | 6 | 10 | 18 | 18 |
| SAP_APPL 6.05 | \(\checkmark\) | \(\checkmark\) | \(\checkmark\) | 4 | 15 | 15 |
| SAP_APPL 6.06 | \(\checkmark\) | \(\checkmark\) | \(\checkmark\) | \(\checkmark\) | 17 | 17 |
| SAP_APPL 6.16 | \(\checkmark\) | \(\checkmark\) | \(\checkmark\) | \(\checkmark\) | 10 | 10 |
| SAP_FIN 6.17 | \(\checkmark\) | \(\checkmark\) | \(\checkmark\) | \(\checkmark\) | 10 | 12 |
| SAP_FIN 6.18 | \(\checkmark\) | \(\checkmark\) | \(\checkmark\) | \(\checkmark\) | \(\checkmark\) | 02 |
| SAP_FIN 7.00 | \(\checkmark\) | \(\checkmark\) | \(\checkmark\) | \(\checkmark\) | 07 | 09 |
| SAP_FIN 7.20 | \(\checkmark\) | \(\checkmark\) | \(\checkmark\) | \(\checkmark\) | 03 | 05 |
| SAP_FIN 7.20 | \(\checkmark\) | \(\checkmark\) | \(\checkmark\) | \(\checkmark\) | \(\checkmark\) | 03 |
| S4CORE 100 | \(\checkmark\) | \(\checkmark\) | \(\checkmark\) | \(\checkmark\) | \(\checkmark\) | 02 |

Table 15: DART: SAP Releases and Corresponding Support Packages Containing DART

In 2016, DSAG will request that the DART segment/field catalog be extended to include the content which has been available since the extension of authorization roles for Z1/Z2 access in September 2015\textsuperscript{288} in Z3 access, as well. A SAP Note will provide information on the availability of individual extensions that are bundled in DART version 2.8e.

\textsuperscript{286} This version of the application recommendations for data access describes the scope of functionality available in SAP Business Suite (ECC 6.00 and later). This corresponds to DART 2.5 and later. For DART versions earlier than version 2.5, please refer to the information in version 3.02 of the application recommendations (dated January 8, 2010): https://www.dsag.de/fileadmin/media/downloads/20100114_Handlungsempfehlung_GDPdU_Update.pdf.

\textsuperscript{287} DART 2.7e is to be delivered in individual SAP Notes. The numbers of the support packages in the above list refer to composite SAP Notes. Some of the respective individual SAP Notes are available in advance.

\textsuperscript{288} Cf. Chapter 5.4.1 on the extension of Z1/Z2 access.
5.5.3 SYSTEM DOCUMENTATION/HELP FOR DART

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

Help → Application Help

... which is available from any transaction. For transactions relating to DART, the relevant passage from the DART online documentation is used according to the context at hand.

For example:
Transaction FTWQ Configure data file data segments.

![Figure 24: Customizing: Calling Help for DART Data Segment Configuration (Transaction FTWQ)](image)

Calling up the help function leads to the section "Data Segment Configuration".
Figure 25: Customizing: Displaying Help for DART Data Segment Configuration (Transaction FTWQ)

The DART documentation was completely revised by SAP for DART 2.7. You can also call it up directly via the following link:
5.5.4 DART TRANSACTIONS AND REPORTS

The following table shows the total scope of the transactions associated with the DART tool:

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Short description of transaction</th>
<th>Linked to program</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTW0</td>
<td>Area menu</td>
<td></td>
</tr>
<tr>
<td>FTW1A</td>
<td>Extract data</td>
<td>RTXWCFC02</td>
</tr>
<tr>
<td>FTWAD</td>
<td>Associated data detector</td>
<td>RTXWQU06</td>
</tr>
<tr>
<td>FTWC</td>
<td>Merge extracts</td>
<td>RTXWMG01</td>
</tr>
<tr>
<td>FTWCF</td>
<td>Field catalog</td>
<td>RTXWCATF</td>
</tr>
<tr>
<td>FTWCS</td>
<td>Segment catalog</td>
<td>RTXWCATS</td>
</tr>
<tr>
<td>FTWD</td>
<td>Verify data extract checksums</td>
<td>RTXWCHK2</td>
</tr>
<tr>
<td>FTWE</td>
<td>Verify control totals (FI documents)</td>
<td>RTXWCHK11</td>
</tr>
<tr>
<td>FTWE1</td>
<td>Verify all FI control totals</td>
<td>RTXWCHK4</td>
</tr>
<tr>
<td>FTWES</td>
<td>Data extract splitter</td>
<td>RTXWQU05</td>
</tr>
<tr>
<td>FTWESL</td>
<td>Display extract splitter log</td>
<td>RTXWVWL3</td>
</tr>
<tr>
<td>FTWF</td>
<td>Data extract browser</td>
<td>RTXWQU01</td>
</tr>
<tr>
<td>FTWH</td>
<td>Data view queries</td>
<td>RTXWQU03</td>
</tr>
<tr>
<td>FTWI</td>
<td>Create background job</td>
<td>RTXWBTCH</td>
</tr>
<tr>
<td>FTWK</td>
<td>Delete extracts</td>
<td>RTXWDELF</td>
</tr>
<tr>
<td>FTWL</td>
<td>Display extract log</td>
<td>RTXWLOG2</td>
</tr>
<tr>
<td>FTWM</td>
<td>Rebuild data extract</td>
<td>RTXWCFC05</td>
</tr>
<tr>
<td>FTWN</td>
<td>Display view query log</td>
<td>RTXWVWL2</td>
</tr>
<tr>
<td>FTWP</td>
<td>Settings for data extraction</td>
<td>SAPMTXWC</td>
</tr>
<tr>
<td>FTWQ</td>
<td>Configure data file data segments</td>
<td>RTXWSM3X</td>
</tr>
<tr>
<td>FTWR</td>
<td>File size: Worksheet</td>
<td>RTXWSIZE</td>
</tr>
<tr>
<td>FTWSCC</td>
<td>DART: Settings for Company Codes</td>
<td>RTXWSM3X</td>
</tr>
<tr>
<td>FTWW</td>
<td>List segment information</td>
<td>RTXWLS01</td>
</tr>
<tr>
<td>FTWY</td>
<td>Maintain data file view</td>
<td>SAPMTXWV</td>
</tr>
<tr>
<td>FTWYR</td>
<td>DART: Maintain Segment Relationships</td>
<td>RTXWSM3X</td>
</tr>
</tbody>
</table>

Table 16: DART: List of Transactions (as of DART 2.8)

5.5.5 DART MODULE OVERVIEW

DART can be used to extract data from different SAP modules for external audits. This assumes that SAP data archiving has not yet been performed for the extraction period.
The following overview depicts the extraction scope with the assigned archiving objects.

<table>
<thead>
<tr>
<th>Module</th>
<th>Description</th>
<th>Extraction Scope</th>
<th>Archiving Objects</th>
</tr>
</thead>
<tbody>
<tr>
<td>FI</td>
<td>Financials</td>
<td>● Finance documents</td>
<td>● FI_ACCOUNT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Open items list</td>
<td>● FI_ACCPAYB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● FI/CO reconciliation</td>
<td>● FI_ACCCRECV</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Change documents</td>
<td>● FI_BANKS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Tax data</td>
<td>● FI_DOCUMNT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● FI_MONTHLY or</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● FI_TF_CRE,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● FI_TF_DEB,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● FI_TF_GLF</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● CHANGEDOCU</td>
</tr>
<tr>
<td>JV</td>
<td>Joint venture accounting</td>
<td>● Transactional/master data, joint venture accounting</td>
<td>● JV_OBJECT</td>
</tr>
<tr>
<td>AA</td>
<td>Asset accounting</td>
<td>● Asset documents</td>
<td>● AM_ASSET</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Change documents</td>
<td>● CHANGEDOCU</td>
</tr>
<tr>
<td>CO</td>
<td>Controlling</td>
<td>● Controlling documents</td>
<td>● COPA2xxxx or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● FI/CO reconciliation</td>
<td>COPABxxxx</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Statistical CO document items</td>
<td>● CO_ALEITEM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Cost center hierarchies</td>
<td>● CO_ALLO_ST</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Profit center hierarchies</td>
<td>● CO_CCMAST</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● CO primary postings</td>
<td>● CO_CCTR_EP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● CO secondary postings</td>
<td>● CO_CCTR_ID</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● CO_CCTR_PL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● CO CEL RCL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● CO COSTCTR</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● CO ITEM</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● CO KSTRG</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● CO ORDER</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● CO PROCESS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● CO TOTAL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● PM ORDER</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● PP BKFLUSH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● PP_ORDER</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● PR ORDER</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● PS PROJECT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● QM CONTROL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module</th>
<th>Description</th>
<th>Extraction Scope</th>
<th>Archiving Objects</th>
</tr>
</thead>
</table>
| MM     | Materials management | ● Material documents  
         | ● Purchase orders  
         | ● Change documents   | ● MM_EKKO  
         | ● MM_MATBEL  
         | ● MM_MATNR  
         | ● MM_PREF  
         | ● MM_REBEL  
         | ● MM_SPSTOCK  
         | ● CHANGEDOCU |
| SD     | Sales and distribution | ● Sales documents  
         | ● Delivery documents  
         | ● Billing documents  
         | ● Billing document pricing conditions | ● FT_VEIAV  
         | ● FT_VEXAV  
         | ● RV_LIKP  
         | ● SD_VBAK  
         | ● SD_VBKA  
         | ● SD_VBRK |
| TR (CFM) | Corp. finance mgmt.  
          | BP (treasury) | ● Treasury documents  
         | ● Historic transaction data | ● TRTM_FTR |
| CL     | Consumer mortgage and loans | ● CM documents | ● CMLDOCUMNT |
| RE     | Real estate management | ● Real estate documents | ● RE_BUILDNG  
         | ● RE_BUSN_EN  
         | ● RE_MGT_CNT  
         | ● RE_PROPERTY  
         | ● RE_RNTL_AG  
         | ● RE_RNTL_UN  
         | ● RE_STLM_UN |
| TV     | Travel management | ● Travel management | ● PA_TRAVEL |
| XX     | Customer enhancements | ● Special ledger | ● FI_SL_DATA (*) |

Table 17: DART: Module Overview (as of DART 2.7e)

(*) If, for example, cost-of-sales accounting (FI-SL basis) is used, it has to be included by the customer in the DART scope.

5.5.6 DART SEGMENT / FIELD CATALOG (TRANSACTIONS FTWCS / FTWCF)

Transaction FTWCS shows DART data segments which specify the application and production database reference table from which the master data, transaction data, and explanatory data have been incorporated into the DART segments.
Figure 26: Extraction Scope: Example of a Displayed Segment Catalog: Fields for All Country Versions

1. MD = master data
2. TD = transaction data
3. GEN = General (segment contained in all country versions)
4. DE = only in country version DE
5. US = only in country version US

Transaction FTWCF provides a detailed view of the data fields contained in each segment (the field catalog).

Figure 27: Extraction Scope: Example of Displayed Segment Catalog: Fields Only in Country Version "DE"

Figure 28: Extraction Scope: Excerpt of a DART Segment with the Relevant Field Catalog
It is possible to drill down to entries of the field catalog in the cells of the columns "Segment Name" and "Reference Table" to obtain further information.

Doing so displays the fields of the segment at hand (target table for the extract data), as shown below:

![Figure 29: Extraction Scope: Excerpt of Data from a Segment Table](image)

The fields of the reference table (source table for the extract data) are also displayed as follows:

![Figure 30: Extraction Scope: Excerpt of Data from a Reference Table](image)
5.5.7  FIELD CATALOG EXTENSIONS FOR USER-DEFINED DATA FIELDS

If company-specific extensions or modifications have been installed in SAP systems which generate tax-relevant data, the scope of the data catalog must be extended. This is the responsibility of the taxpayer in the context of customer-specific adaptation. All taxpayers remain directly responsible for checking the DART field catalog and adapting it to their own particular circumstances.\(^\text{290}\)

DART is characterized precisely by the way that additional fields can be taken from existing SAP data tables/structures and data tables from customer-specific developments within an SAP system can be included in the DART data scope. Customer enhancements of existing segment structures are indicated as "customer includes" in the field catalog; their own tables are transferred to their own DART segment structures and are thus to be defined outside of the SAP namespace.

The procedure whereby customer-specific tables are included in the DART field catalog is described in the SAP explanations relating to DART Version 2.6.\(^\text{291}\)

5.5.8  DART AUTHORIZATIONS

5.5.8.1  Complete Overview of DART Authorization Checking

A complete overview of the authorizations checked in the course of calling DART transactions (including the basic authorizations) is provided by transaction SU22 – Maintain Authorization Defaults(SAP) for Transactions.

---

\(^\text{290}\) Cf. Chapter 5.5.6.
\(^\text{291}\) Cf. https://service.sap.com/ilm, in reference to the data retention tool and media library (downloading); document: "Data Retention Tool 2.6 – Overview (slides only)", slides 74 – 79.
For DART transactions FTW* (package FTW1), the system displays the number of authorization objects which will be checked. The following figure shows an example of an excerpt from the result list.

Figure 31: DART Authorizations Excerpt from the Result List for Transaction SU22

5.5.8.2 DART Authorization Objects

For authorization checking, the DART tool relies on a few specific authorization objects which are described briefly below.

Further information is provided by the SAP explanations relating to DART Version 2.6, which are available for download on SAP Service Marketplace 292.

<table>
<thead>
<tr>
<th>Authorization Object</th>
<th>Description</th>
<th>Authorization Fields/Explanations</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>F_TXW_RA</td>
<td>Retrieve data from archive or deleted retrieved data.</td>
<td>BUKRS Company code</td>
<td></td>
</tr>
</tbody>
</table>

292 Cf. http://service.sap.com/ilm, in reference to the data retention tool and media library (downloading); document: “Data Retention Tool 2.6 – Overview (slides only)”, slides 80 – 84.
<table>
<thead>
<tr>
<th>Authorization Object</th>
<th>Description</th>
<th>Authorization Fields/Explanations</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>F_TXW_TV</td>
<td>Run, delete, and archive data view queries and export them to the local PC</td>
<td>ACTVT Activity&lt;br&gt;BRGRU Authorization group&lt;br&gt;BUKRS Company code&lt;br&gt;Activities 24 / 25 permit the filing or calling of views from a connected archive system&lt;br&gt;Activity 61 (export view report into file) supports exports to the file system of the application server.</td>
<td>03 Display&lt;br&gt;06 Delete&lt;br&gt;24 Archive&lt;br&gt;25 Reload&lt;br&gt;61 Export</td>
</tr>
<tr>
<td>F_TXW_TF</td>
<td>Create, display, delete, archive data extracts</td>
<td>ACTVT Activity&lt;br&gt;BUKRS Company code</td>
<td>01 Create&lt;br&gt;03 Display&lt;br&gt;06 Delete&lt;br&gt;24 Archive&lt;br&gt;25 Reload</td>
</tr>
<tr>
<td>F_TXW_TFCF</td>
<td>Configure data extracts</td>
<td>ACTVT Activity</td>
<td>02 Change</td>
</tr>
<tr>
<td>F_TXW_TVC2</td>
<td>Create or change data view queries</td>
<td>ACTVT Activity&lt;br&gt;BEGRU Authorization group&lt;br&gt;Set up maintenance protection for view files for user groups. The authorization groups are maintained with transaction FTXW&lt;br&gt;Prerequisite:&lt;br&gt;Parameters in table TXW_C_GLO are set:&lt;br&gt;PARM_NAME: AUTH_VIEW_DEF&lt;br&gt;PARM_VALUE: AUTHGRP&lt;br&gt;Note:&lt;br&gt;The parameter is not set in the standard system.</td>
<td>02 Change&lt;br&gt;03 Display</td>
</tr>
<tr>
<td>F_TXW_TVCF</td>
<td>Change configuration of data view queries</td>
<td>ACTVT Activity</td>
<td>02 Change&lt;br&gt;03 Display</td>
</tr>
</tbody>
</table>

Table 18: DART: Authorization Objects
5.5.9 DART VERSION MAINTENANCE

DART is updated as part of the usual delivery logistics via SAP Notes which are contained in support packages.

Due to operational requirements, an upgrade to a new DART release can be incorporated into an SAP system by means of the relevant SAP Note and its attached special transport. Each company must determine the extent to which a rollout can take place during an ongoing year as a special transport (that is, outside of the procedures for importing support packages) or as a normal support package update.

Generally, a DART release is implemented in a taxpayer's system some time after the program supplements have been delivered. In doing so, companies should observe their usual quality assurance procedures for all changes made to their established production systems.

PRACTICAL TIP:

DART should always be updated once a year to the currently available version of the DART Notes.

For those that create extracts annually, we recommend carrying out these updates beforehand.

When creating extracts during an ongoing year, the most suitable point in time for doing so should be determined based on the case at hand.

5.5.10 SEQUENCE OF DART EXTRACT CREATION

5.5.10.1 Separation of Included Data

Only the data which was actually generated in the selection period (transaction data) is extracted. All relevant data, such as:

- Master data
- Change documents for relevant transaction and master data
- Explanatory data

---

293 Cf. SAP Note 582583 – DART – Version maintenance.
Dependent tables

... is automatically included without the user having to select it, insofar as it is specified in the segment or field catalog.

**PRACTICAL TIP:**

DART extracts should be created soon after work on the year-end closing for the fiscal year is completed (which results in an audit certificate).

Extracts are usually created once a year. If the resulting dataset requires extracts to be created during the year for a partial period, then DART offers (as of version 2.4) the option to exclude the master data for the monthly extracts in the course of data extraction and to create a pure master data extract separately following the extraction of the last period. In DART 2.4 and later, the new viewer provides the option to evaluate transaction and master data extracts jointly and to display the data in a common view.

If extracts without master data are created during a year, it is necessary to activate master data selection in DART customizing (transaction FTWP). When defining the scope of an individual extraction run, the transaction data segments are selected; the master data selection is then called up and the existing selection is deselected for all master data segments. The next figure shows an example of this:

![Figure 32: Extract Creation: Extract Without Master Data](image)

To create an extract consisting solely of master data at the end of the fiscal year, the selection has to be adjusted accordingly. This means selecting all master data without including any transaction data.
When extracting transaction and master data in parallel, it is possible to restrict the master data to the master data used in the transaction data. This option is not provided for pure master data extracts. This is due to the fact that, in the absence of available transaction data in a given extract, no dependencies can be established between the transaction data and the master data during extraction. Although this approach increases the volume of the master data extracted, it only leads to slightly more data in practice. It also reduces the data volume significantly compared to monthly data extraction. The following figure shows the settings for extractions consisting solely of master data.

**Figure 33: Extract Creation: Extract with Only Master Data**

If individual modules are not used and no transaction data written to the monthly extracts as a result, the corresponding master data segments do not have to be extracted. They can be manually deselected using the function shown above.

**PRACTICAL TIP:**

When compiling views of several extracts for a fiscal year, the master data from the last extract should be selected and mixed with the transaction data to avoid including several instances of master data with the same account number.

If the changes in the master data are of interest to the external auditor, he/she can be provided with master data change documents, which are also extracted automatically during extract creation.
Due to the complex and performance-intensive detailed selection of change documents, extract creation does not currently support restrictions based on individual company codes. If there is more than one company code in a client, each extract thus contains all relevant change documents for the master data of all company codes. This increases both runtime and the volume of data produced.

PRACTICAL TIP:

For the change documents of all company codes, we recommend creating a separate extract following the creation of extracts for the individual company codes, which contain the respective closing periods (provided that midyear extracts are created).

When creating master data extracts by company code (cf. Figure 33), the segments:

- TXW_CD_ANLA Change Documents Asset Master
- TXW_CD_DEBI Change Documents Customers
- TXW_CD_KRED Change Documents Vendors
- TXW_CD_SACH Change Documents G/L Accounts
- TXW_CD_MATERIAL Change Documents Material Master

... are to be deselected manually in the list.

To create an extract containing only the change documents of the aforementioned segments, all master data segments must be deselected (cf. Figure 32) and only the individual listed segments selected.

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

Basically, an extract should contain only one company code. It is possible, however, to combine several company codes in one extract. This is recommended only if the legal entity to be audited includes several company codes.

In view of the possibility of an external auditor gaining Z1/Z2 access to data extracts of systems which have been shut down, this ensures that the external auditor may access only the company codes specified in the audit directive at hand. Access

Cf. Chapter 5.4.2.
to extract content can be checked only at the company code level. There is no check for organizational units in connection with further data in the extract from other modules.

5.5.10.2 Periodic Extract Formation

At most, a data extract includes all posting periods of a company code for an entire fiscal year (a maximum of 16 posting periods). A data extract can technically include as many as 1,058 files \(^{295}\), each of them 2GB in size. Depending on the data volume (and thus the extraction runtimes), it may be necessary to create midyear data extracts. This results in a maximum of 14 ASCII file sets: one set with n files for each posting period (without master data and change documents), one set for closing periods 13 – 16 (if used), and one set with n files for master data (depending on the data volume and specifications in customizing) for a given company code in the case of monthly extraction. A comprehensive set is also compiled with the change documents for the master data of all company codes.

To determine periodic extraction dates, the following reference points can be used:

- After month-end or end-of-quarter closing, but only after the permitted posting period is locked (table T001B)
- After submitting an advance VAT return (which should include postings for final VAT corrections and the VAT to be paid)

PRACTICAL TIP:

If extracts were already taken directly after a period-end closing, but the posting periods were subsequently re-opened and postings were made during the same time span, the extracts already generated will incomplete from that point forward and require regeneration.

If follow-up postings are required in a closed posting period, more precise organizational regulations are required to discard the extracts already generated from the re-opened posting period and regenerate the new extract(s).

\(^{295}\) Only applies to DART 2.8 and later. Version 2.7E and earlier releases support up to 99 files.
Reasons for non-periodic extractions may include the following in particular:

- Data was outsourced before SAP systems were shut down
- Datasets were handed over to the legal successor upon the sale of a company. The buyer has taken responsibility for data retention and is now the designated contact for the auditor.
- Changes in organizational structure: chart of accounts conversions, merging of individual company codes into one single company code or division of one company code into several new company codes by means of consolidation/separation of data in the database.

PRACTICAL TIP:

Whenever midyear extracts are created for posting periods in a given fiscal year, it is necessary to ensure that this is done with only one DART version; 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 that have been added by a new DART version, which will only available for extracts created after the new DART version was implemented.

If a midyear update of DART cannot be avoided, the extracts in the multi selection are to be listed in descending order by creation date during view creation.

5.5.10.3 Naming Conventions for DART Extracts

We recommend applying a uniform notation to extract files. The following table shows the minimum information which should be included in the name of a file and how a naming convention can be designed.

<table>
<thead>
<tr>
<th>Digits</th>
<th>Content (Example)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 3</td>
<td>PA8</td>
<td>System</td>
</tr>
<tr>
<td>4</td>
<td>_</td>
<td>Separator</td>
</tr>
<tr>
<td>5 – 7</td>
<td>100</td>
<td>Client number&lt;sup&gt;296&lt;/sup&gt;</td>
</tr>
<tr>
<td>8</td>
<td>_</td>
<td>Separator</td>
</tr>
</tbody>
</table>

<sup>296</sup> Components can be left out if, for example, there is only one production client and complete extracts.
According to this naming convention, a data extract could be named as follows:
PA8_800_1000_2015_01_03_B_P_01

The SAP system will automatically create several data files for an extract and number them consecutively if the size of a data file specified in customizing (100 MB is recommended) has been exceeded. If this specification exceeds the total volume of an extract (1,058 files), the sizes should gradually be adjusted upwards. This function ensures that the files created will be of a size that is still manageable for evaluation.
5.5.10.4 Definition of Language for DART Extracts

As soon as a program is scheduled in SAP for background processing (batch execution), the job scheduling is performed by default in the language of the current user. In individual cases, the language has to be adjusted in the job step, which means additional work and an additional source of handling errors.

If audits are generally carried out in the local official language, the aforementioned behavior of the SAP system can result in explanation texts being displayed in another language in extracts. This occurs in particular when extracts are created centrally at a company rather than locally.

To obtain a defined status here, the language can be selected on the selection screen during extract execution as of DART 2.6. The current user's login language is specified as the default value.

![Figure 34: Extract Creation: Definition of Extraction Language](image)

5.5.10.5 DART Extract - Performance Optimization

In the past, extract creation has shown that configurations continue to emerge in which the extraction of individual segments takes an excessively long time.

Classic areas include:

- Open items (especially with G/L accounts)
- CO secondary postings
- CO total costs
- Change documents.

---

297 Cf. SAP Note 1173540 – DART Version 2.6.
For this purpose, SAP has published some SAP Notes \cite{298} which can remedy this situation through optimizations of selection logic or additional database indexes.

### 5.5.10.6 DART Log for Reconciliation Purposes

During extract creation, administrative data (logs) is created at the same time as proof of correctness and stored in the extract file. This enables:

- Any differences between SAP data tables and extract totals/reconciliation data to be determined immediately after extract creation
- Checks as to whether an extract file has been manipulated when accessing it in the future.

The following image shows an excerpt from an extract log in four parts (transaction FTW1A):

```
Results for your selection

<table>
<thead>
<tr>
<th>Segment name</th>
<th>Data records</th>
<th>Segment size</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT Document header</td>
<td>1013</td>
<td>204507</td>
</tr>
<tr>
<td>FI Document item</td>
<td>4959</td>
<td>2253684</td>
</tr>
<tr>
<td>New GL Document item</td>
<td>4955</td>
<td>937516</td>
</tr>
<tr>
<td>Customer balances</td>
<td>128</td>
<td>8307</td>
</tr>
<tr>
<td>Vendor balances</td>
<td>64</td>
<td>4272</td>
</tr>
<tr>
<td>G/L account balances</td>
<td>1618</td>
<td>151666</td>
</tr>
<tr>
<td>Customer (special G/L transaction figures)</td>
<td>1</td>
<td>49</td>
</tr>
<tr>
<td>FI open item</td>
<td>79236</td>
<td>25927569</td>
</tr>
<tr>
<td>CO Document header</td>
<td>963</td>
<td>144466</td>
</tr>
<tr>
<td>CO Document item</td>
<td>2105</td>
<td>406556</td>
</tr>
<tr>
<td>CO Document position (secondary postings)</td>
<td>1160</td>
<td>295942</td>
</tr>
<tr>
<td>CO Document header (secondary postings)</td>
<td>40</td>
<td>5706</td>
</tr>
<tr>
<td>CO Object: Cost Totals</td>
<td>6781</td>
<td>1094624</td>
</tr>
</tbody>
</table>
```

\cite{298} Cf., among others, SAP Note 896894 – DART: Long runtimes in extracting open items; 992803 – Performance - Extracting open items for G/L accounts; 1012235 – FTW1A: Performance extraction COEP - TXW_CO_SPOS, 1225592 – DART: Reduction of no. of change documents in an extract; 2059237 – FTW1A - Performance when extracting change documents; 2237433 – FTW1A: Performance of extraction COEP - TXW_CO_SPOS.
### Control totals

<table>
<thead>
<tr>
<th>CoCd</th>
<th>Pe</th>
<th>AccTy</th>
<th>D/C</th>
<th>Item totals</th>
<th>Items</th>
<th>Account balances</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>01</td>
<td>D</td>
<td>Credit</td>
<td>1.106.000,00-</td>
<td>3</td>
<td>1.106.000,00-</td>
</tr>
<tr>
<td>1000</td>
<td>01</td>
<td>D</td>
<td>Debit</td>
<td>2.223.270,00</td>
<td>4</td>
<td>2.223.270,00</td>
</tr>
<tr>
<td>1000</td>
<td>01</td>
<td>K</td>
<td>Credit</td>
<td>459.582,93-</td>
<td>233</td>
<td>459.582,93-</td>
</tr>
<tr>
<td>1000</td>
<td>01</td>
<td>K</td>
<td>Debit</td>
<td>4.726,06</td>
<td>2</td>
<td>4.726,06</td>
</tr>
<tr>
<td>1000</td>
<td>01</td>
<td>S</td>
<td>Credit</td>
<td>6.915.089,26-</td>
<td>505</td>
<td>6.915.089,26-</td>
</tr>
<tr>
<td>1000</td>
<td>01</td>
<td>S</td>
<td>Debit</td>
<td>6.255.475,33</td>
<td>1.073</td>
<td>6.255.475,33</td>
</tr>
</tbody>
</table>

### Creation of data file:

- **Date and time:** 06.02.2017 08:43:30
- **User:** [redacted]
- **SAP release:** 740 / 2.8
- **Logical system:** FABCLNT800
- **Total file size in MB:** 48
- **Execution time (hh:mm:ss):** 0: 2: 0
- **Data extraction rate (MB/h):** 1.429
- **File encoding:** 3 UTF-3 Unicode Format
- **Index record length:** 053

### Selection criteria:

- **Fiscal year:** 2015
- **Company code:** 1000
- **Period:** 01- 16
- **Depreciation area (AM Asset documents):** 01
- **Ledger:** GL

- Flag: Export all master data
- x Flag: Export standard cost center hierarchies
- _ Flag: Export only classic GL (no NewGL)
- x Flag: Export asset documents (AM)
PRACTICAL TIP:

It is necessary to ensure that the switch "Calculate Data Checksums" is always set during extraction.

This checksum is required to check an extract for changes if SAP data archiving was performed after the extract was created.
5.5.11 DART DATA EXTRACT BROWSER (TRANSACTION FTWF)

The DART Data Extract Browser displays an overview of the content of a data extract as shown in the following figure.

Figure 36: Extract Browser: Excerpt from the Extract Browser (Transaction FTWF)

Insofar as multiple legal units or business units access DART with their own users, it is necessary to limit access to the relevant extracts in each case. This can be implemented as follows using authorization object F_TXW_TF:

- In DART 2.6e, the company code field was added to the administrative data of DART extracts. This is now checked when executing the transactions extract log (FTWL) and extract browser (FTWF).
- For all extracts created before DART 2.6e, SAP has provided the report RTXW-LOG2_ADJUST_COMPCO, which makes it possible to add administrative data.

---

SFAG RECOMMENDATION FOR ACTION – RECOMMENDATIONS ON THE IMPLEMENTATION OF DATA ACCESS (GOBD/GDPDU) BY THE FISCAL AUTHORITIES VERSION 4.01
For releases up to and including DART 2.6, SAP has provided a workaround for authorization checking in SAP Note 1058866\(^{301}\).

DART 2.8 also provides the option to display the segment texts of an extract (not the field headers) in the user's login language or the language in which the extract was created:

![Figure 37: Extract Browser: Selection of Language Display of Segments (Transaction FTWF)](image)

**PRACTICAL TIP:**

Up to and including version 2.3, DART used separate indexes for view creation. As of DART 2.4, these indexes are no longer required.

The indexes can be deleted with report RTXWDELI, which was included in the release of DART 2.5\(^{302}\). This can reduce the size of extracts by up to 30%.

### 5.5.12 RECONCILIATION AND CONTROL OF EXTRACTIONS

#### 5.5.12.1 Verify Control Totals (Transactions FTWE / FTWE1)

Data checksums can be checked with:

- **Transaction FTWE:** Verify control totals (FI documents)
- **Transaction FTWE1:** Verify all FI control totals (in case extract contains data from more than one company code)

... as long as the original data is not archived.

---

\(^{301}\) Cf. SAP Note 1058866 – DART: Authorizations at the extract level.

\(^{302}\) Cf. SAP Note 1050841 – DART Version 2.5.
The following figure shows the screen of transaction FTWE1.

For the same selection periods, the posting totals of the compact document journal RFBELJ00 or the posting totals of the report RFBUSU00 have to have results that are identical to the extract totals from transaction FTWE/FTWE1.
PRACTICAL TIP:

Following creation, extracts have to be checked by the specialist departments responsible.

If subsequent postings have to be made in closed accounting periods, it is necessary from an organizational perspective to ensure that the following procedure is consistently followed:

- Open the accounting period
- Post the documents
- Close the accounting period
- Reconcile whether only the required postings have actually been incorporated into the period and that no other postings have been incorporated without being detected.
- Trigger new extract creation; use file name to mark extract as "new" (include a sequential number, for example)

5.5.12.2 Verify Data Extract Checksums (Transaction FTWD)

When creating data extracts, checksums are saved along with the data if the corresponding option was activated on the selection screen.

With this tool, the control totals are calculated again by means of the extract file(s). This demonstrates that the method of storage at hand is audit-proof and the files are identical to those created at the time of extraction.
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 archive is available which enables the archiving of extracts via ArchiveLink, the DART extract files can be archived there. Otherwise, another form of audit-proof data/file storage has to be organized.

Preferably one certified by SAP and implemented as a GoBS/GoBD-compliant procedure.

---

[Image: DART: Verify data extract checksums]

Figure 39: Extract Control: Verify Data Extract Checksums – Details (Transaction FTWD)

Figure 40: Extract Control: Verify Data Extract Checksums – Summary (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 archive is available which enables the archiving of extracts via ArchiveLink, the DART extract files can be archived there. Otherwise, another form of audit-proof data/file storage has to be organized.

Preferably one certified by SAP and implemented as a GoBS/GoBD-compliant procedure.
In DART 2.8, extract files can also be subjected to real compression for archiving via ArchiveLink. The resulting files then require archive space amounting to approx. 10-15% of their original size. When importing them from the archive, the files are automatically unpacked and made available again in their usual size for evaluation.

5.5.14 VIEW FORMATION

Displays of data extracts (SAP calls them "views") are created using transaction FTWY.

5.5.14.1 General Information

DART extracts contain a consistent stock of tax-relevant data from a given posting period which was created in the past in anticipation of future audits. This data serves as a basis for responding to auditor queries in digital form.

Written auditor queries are converted into technical views. The required data scope is mapped using DART views. Here, the relevant DART extracts are used for the defined audit period.

Views allow specific fields to be selected from different data segments (for example, document headers, line items, or master data) and the results to be written to an output file (view file).

In DART, a table with "dependencies" is available. Dependencies explain the table links to the external auditor and contain information on how segment tables are interconnected (for example). As of DART 2.5, they can be supplemented by the customer via transaction FTWYR.

The description standard recommended by the fiscal authorities is not required for DART views since the auditor tool IDEA® supports the SAP audit format as an import format.

5.5.14.2 Naming Conventions for Views

The naming convention described below provides the option of assigning a view to an application. The actual content of the view is mapped in the description text rather than in the name of the view definition.

---

BMF information on the description standard, loc. cit.
Table 20: Naming Convention: For View Definitions

<table>
<thead>
<tr>
<th>Digits</th>
<th>Recommendation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Z</td>
<td>Symbol for customer namespace</td>
</tr>
<tr>
<td>2</td>
<td>_</td>
<td>Separator</td>
</tr>
<tr>
<td>3 – 4</td>
<td>FI</td>
<td>Module indicator (in this case, Financials)</td>
</tr>
<tr>
<td>5</td>
<td>_</td>
<td>Separator</td>
</tr>
<tr>
<td>6 – 10</td>
<td>00001</td>
<td>Sequence number</td>
</tr>
</tbody>
</table>

5.5.14.3 Define Views (Transaction FTWY)

A comprehensive description of view definition would go beyond the scope of this document. It should be relatively easy for experienced application consultants, SAP users with knowledge of SAP Query, and ABAP programmers to familiarize themselves with views. However, we do recommend developing a familiarity with this subject in good time before the start of an external audit. The SAP workshop WDE680 provides an in-depth introduction to view formation.

For view definition, the join condition – that is, the manner in which the individual data segments involved should be interconnected – is of particular importance.

A join is a combination of data records from two or more tables in a relational database system. Similarly, a join in DART implies the combination of data records from two or more segments into one extract.

The join condition can be used as follows:

- In order to select only data elements that are present in all linked data segments, an "inner join" must be activated.
- To select all data elements that match the selections from the linked data segments, an "outer join" must be activated.

For an explanation of join terms, see the glossary in Chapter 7.5.
The SAP standard offers a number of suggested views. WG Data Access and SAP are engaged in an ongoing effort to extend these suggestions based on practical insights gained in routine audits.

As an initial step, standard views for the modules FI (1SAP_FInn and 1SAP_XXnn) and SD (1SAP_SDnn; nn = sequence number for differentiation) have been prepared by WG Data Access and delivered by SAP. Additional development requests for views in modules MM and AM are being prepared.

To create a view based on the standard 1SAP* views, users must proceed as follows:

- Copy the standard 1SAP* view to the customer namespace Z*
- Select the relevant fields specified by the auditor
- Delete all unnecessary data fields and add any that are missing
- Reduce the selection fields to the minimum number required (to optimize performance).

Unnecessary fields and selection conditions lead to longer processing times in creating view files.

### 5.5.14.4 Create View Files (Transaction FTWH)

All evaluations of DART extracts are performed by calling views to display or create a view file.

If an evaluation is first called up as an online display and is then transferred to MS EXCEL in the ALV, the maximum possible number of rows per worksheet in MS EXCEL (depending on the version) must be observed.

Due to the system, the online display is limited to approx. 100,000 rows and a maximum of 99 columns (the technical limits of the ALV) regardless of which selection values were specified when executing the view.
**PRACTICAL TIP:**

DSAG recommends downloading files in the SAP audit format. This format contains eight descriptive headers which map the importance of individual columns in a form that IDEA® can automatically interpret.

### 5.5.14.5 Naming Conventions for View Files:

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

The following rules can be used as an example for naming structures:

<table>
<thead>
<tr>
<th>Digits</th>
<th>Recommendation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Z</td>
<td>Symbol for customer namespace</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Separator</td>
</tr>
<tr>
<td>3 – 4</td>
<td>FI</td>
<td>Module indicator (in this case, Financials)</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Separator</td>
</tr>
<tr>
<td>6 – 9</td>
<td>0001</td>
<td>Company code</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>Separator</td>
</tr>
<tr>
<td>11 – 14</td>
<td>2010</td>
<td>Fiscal year</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>Separator</td>
</tr>
<tr>
<td>16 – 18</td>
<td>001</td>
<td>Sequence number</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>Separator</td>
</tr>
<tr>
<td>20 – 30</td>
<td>&lt;Text&gt;</td>
<td>Additional text if necessary</td>
</tr>
</tbody>
</table>

**Table 21: Naming Convention: For View Files**

The description text allows space (40 characters) for additional information.
PRACTICAL TIP:

Insofar as legal requirements have been stipulated for the file name in a given audit directive, it is necessary to ensure that the view files in SAP are usually written to the same directory for different years. We thus recommend choosing a file name that allows for appropriate distinctions in SAP (for example, by year). The file can then be renamed as required after it is downloaded to a local computer (before being transferred to the external auditor).

5.5.15 PERFORMANCE IN VIEW EXECUTION

DART 2.6 provides a revised view logic which no longer burdens the temporary memory used by SAP processes. The data of each segment of a view is read in succession from the extract and stored in temporary database tables. The restrictions of the selection screen are applied here to the respective segment. This reduces the volume of data to be processed further (if necessary). If the view contains more than one segment, the data is then merged in several steps according to the join conditions at hand.

This optimized version of the view logic enables views of large datasets to be processed without overflow problems.

PRACTICAL TIP:

If an evaluation is performed when executing view extracts from different versions of DART, the option "Use DDIC structures" should be set on the selection screen of the view. This ensures that the current version of the underlying structures is used.

Otherwise, the respective structure is determined from the extract which ranks first in the extract selection. Any fields not available there will also no longer be included in the other extracts of the view. At runtime, the view may thus include fewer fields than the number available in other extracts.
5.5.15.1 Transfer of DART Views to the External Auditor

DART extracts are technically unsuitable for importing into the auditing software IDEA®!
DART views in the SAP audit format can be directly imported and prepared by IDEA® because this is the only format that contains a field description in the first eight lines of the file.

PRACTICAL TIP:

It is important to pay attention to the path a view file takes through the system between its creation and the generation of a data medium (CD/DVD, USB device, etc.). If different operating system environments (for example, UNIX® and Microsoft® Windows®) are used, view files must be transferred via FTP. Otherwise, there is a risk that the hexadecimal code at the end of the line of a data record may be destroyed, rendering the file unreadable in IDEA®.

By the same token, initial (empty) date fields and the use of periods and commas in numbers are matters that require discussion when processing data further in subsequent systems such as IDEA®.

PRACTICAL TIP:

If the exchange directory is accessed directly to transfer view files instead of using the download function of transaction FTWN, only the view files can be transferred. The identically named files with the extension _MT contain only SAP control information for the SAP ALV display.
**PRACTICAL TIP:**

If the SAP system at hand is a Unicode system, the view files will be created in UTF-8 format.

The IDEA® versions available in Germany do not support Unicode. It may thus be necessary for the generated view files to be converted to ANSI format before they are transferred to the external auditor.

### 5.5.15.2 Display View Contents (Transaction FTWN)

Transaction FTWN provides displays of view logs with more details of the creation date and the storage location of a given view file. It also offers access to view content using ALV technology.

### 5.5.16 AUTOMATION OF EXTRACT CREATION

For companies with a large number of company codes, the extraction process can be very time-consuming if midyear extract creation is selected.

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

Variable input parameters such as company code, fiscal year, extraction period, language, and name of extract can be transferred dynamically. In program variants that have to be precisely defined in advance, 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.

---

308 Applies to version 9.x and earlier. A German version of 10.x was not yet available when this documentation was compiled.

309 A connection to SAP Closing Cockpit and SAP Financial Closing Cockpit (add-on subject to a fee) is also possible.
Process chains can be defined for DART in Schedule Manager after these preparations. A process chain of this kind could take the following form:

![Figure 42: Extract Creation: Possible Process Chain for DART Extraction Using Schedule Manager](image)

In SAP Schedule Manager, it is possible to notify a specific person/group via an express message that action is required for a given extract in the event of an error.

These defined process chains can then be scheduled in SAP Schedule Manager for fixed points in time or in cycles.
Additional information can be found in the SAP Note on DART 2.6 and under the component for SAP Schedule Manager (CA-GTF-SCM) on SAP Service Marketplace (https://support.sap.com/notes).

### 5.5.17 SUMMARY DART

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customizing (initial configuration) only requires minor effort.</td>
<td>High maintenance effort due to continuous monitoring of SAP Notes.</td>
</tr>
<tr>
<td>Free-of-charge as part of the standard for all releases currently covered</td>
<td></td>
</tr>
<tr>
<td></td>
<td>by maintenance.</td>
</tr>
<tr>
<td>DART extracts can be evaluated in an SAP ERP 6.0 system, which must not</td>
<td>Application only for SAP systems; another solution must be found for non-</td>
</tr>
<tr>
<td>necessarily be identical to the source SAP system. An evaluation is</td>
<td>SAP systems.</td>
</tr>
<tr>
<td>possible in a system with the same or a later release compared to the</td>
<td></td>
</tr>
<tr>
<td>generating system.</td>
<td></td>
</tr>
<tr>
<td>Update can be performed as a special transport.</td>
<td>Importing of special transports is time-consuming.</td>
</tr>
<tr>
<td>Data scope is updated continuously on the basis of practical evidence.</td>
<td></td>
</tr>
<tr>
<td>Standard starting point for all SAP users.</td>
<td></td>
</tr>
<tr>
<td>DART can be used to &quot;freeze&quot; data for shutdown concepts. Source system</td>
<td></td>
</tr>
<tr>
<td>does not have to correspond to the evaluation system.</td>
<td></td>
</tr>
<tr>
<td>Merger or acquisition scenarios can be mapped.</td>
<td></td>
</tr>
<tr>
<td>In the event of a chart of accounts change, all historically relevant</td>
<td></td>
</tr>
<tr>
<td>data in the original definition remains evaluable in DART extracts that</td>
<td></td>
</tr>
<tr>
<td>already exist.</td>
<td></td>
</tr>
<tr>
<td>It is possible to add SAP standard fields to the data catalog due to</td>
<td></td>
</tr>
<tr>
<td>custom developments.</td>
<td></td>
</tr>
<tr>
<td>Additions of customer-specific tax-relevant data tables to the data</td>
<td></td>
</tr>
<tr>
<td>catalog are possible; applies to tables that do not originate from the</td>
<td></td>
</tr>
<tr>
<td>SAP namespace.</td>
<td></td>
</tr>
<tr>
<td>Extraction must take place before outsourcing (SAP data archiving);</td>
<td></td>
</tr>
<tr>
<td>subsequent update is very time-consuming or impossible.</td>
<td></td>
</tr>
</tbody>
</table>

Cf. SAP Note 1173540 – DART Version 2.6.
5.5.18 OUTLOOK FOR DART FOR APPLICATIONS IN SAP-S/4HANA

With the delivery of new products such as SAP Simple Finance (release 1503 and higher, which build on HANA database technology) and the corresponding adjustments in logistics applications, the question arises as to how DART deals with the new technology and the data structures.

As a result of the new products, structural changes were made to the database tables and new tables like the Universal Journal (table ACDOCA) were created in FI. Documents from multiple applications are combined in this new database table and many previously separate data totals, such as totals tables, have been removed:

- External accounting (FI)
- Internal accounting (CO)
- Profit center accounting (PCA)
- Asset accounting (AA)
- Costing-based profitability analysis (CO-PA)
- And others.

To enable users to access both the "old" (relational database) and "new" world (HANA database), SAP is providing compatibility views for an undefined transition period. These views allow access to data generated before conversions to the new database technology, but also to data located in the new tables, even though access is still based on the old table names.

For more information, see SAP Note 2237125 \(^{311}\) and additional SAP Notes specified therein.

\(^{311}\) SAP Note 2237125 – DART: Use in SAP Simple Finance and SAP S/4HANA.
DSAG WG Data Access will deal in the future with the adaptation of DART functionality to the new SAP products. A statement will be released after the financials and logistics solutions have been fully delivered.

5.6 CUSTOMER DEVELOPMENTS/PARTNER OBJECTS IN SAP

Apart from objects contained in the standard SAP DART data catalog, developments by customers or SAP partners can also be tax-relevant in an SAP system.

Up to now, there was no way of using a tool to determine customer and/or partner objects while simultaneously differentiating between new developments and changes. It was not possible to select these objects and provide them with freely definable attributes within an SAP system.

Based on a DSAG development request, SAP has created a tool for the determination, classification (via attributes), and documentation of objects in a given SAP system:

**COAT – Customer Object Administration Tool**

With COAT, it is possible to select objects from the ABAP Dictionary for predefined object types in freely selectable namespaces. The objects thus selected can now be documented via freely definable attributes, links to existing documents, and the reason at hand. It is possible to mark tax-relevant objects accordingly as part of this documentation.

Internal timestamps can be used to determine whether objects have been changed or newly developed since the specification/storage of attributes in the SAP system.

COAT makes it possible to save this classification as exportable extracts in the SAP audit format. Z2 access to this data is possible in production systems.

COAT enables external auditors to obtain an overview of all non-standard SAP objects in an SAP system. By using COAT, there is no longer a need to fall back on transactions such as SE16/SE16N or SA38, which were previously required by external auditors on a case-by-case basis 312.

5.6.1 COAT – OVERVIEW

COAT is delivered in the software layer SAP_ABA (application basis) and is thus available for all SAP system types (CRM, SRM, etc.), not only ERP.

312 Cf. Chapter 5.4.
Version 2.0 was delivered at the end of 2008. Meanwhile, version 2.4 has been available since the start of 2016. You can find the SAP Notes for COAT via the component AC-CO-AT.

The following table shows the number of the support package (✓ = already included in the delivery version of the release, X = available only by manually implementing the Note) in which the relevant COAT version was delivered.

<table>
<thead>
<tr>
<th>COAT Release</th>
<th>2.0</th>
<th>2.1</th>
<th>2.2</th>
<th>2.3</th>
<th>2.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP Note</td>
<td>1089923</td>
<td>1774507</td>
<td>1783942</td>
<td>1862736</td>
<td>2235263</td>
</tr>
<tr>
<td>SAP_ABA 700</td>
<td>18</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>SAP_ABA 701</td>
<td>02/03</td>
<td>X</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>SAP_ABA 702</td>
<td>✓</td>
<td>13</td>
<td>14</td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td>SAP_ABA 710</td>
<td>07/08</td>
<td>16</td>
<td>17</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td>SAP_ABA 711</td>
<td>01/02</td>
<td>11</td>
<td>12</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>SAP_ABA 730</td>
<td>✓</td>
<td>9</td>
<td>10</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>SAP_ABA 731</td>
<td>✓</td>
<td>6</td>
<td>9</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>SAP_ABA 740</td>
<td>✓</td>
<td>1</td>
<td>3</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>SAP_ABA 75A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>05</td>
</tr>
<tr>
<td>SAP_ABA 750</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>05</td>
</tr>
</tbody>
</table>

Table 23: COAT: Support Packages Containing COAT for Individual SAP Releases
As of COAT 2.3, the tool is accessed via the COAT_TOOL transaction.

![COAT Toolbox: COAT Version 2.4](image)

If COAT 2.3 is not yet installed, access is possible via the COAT transaction.

For the initialization of COAT with SAP sales delivery amounts, it is necessary to run the report RCOATCRE once per system before its initial use. This involves SAP customizing for COAT, which is provided in this manner and does not have to be manually entered.

Some technical settings in table COAT_FLAGS are also delivered through initialization. If COAT is newly installed, the value for the entry COAT_TOOLBOX_TREE - MIGRATION_REMOVE can be set to the flag "X". This prevents a rerun of the migration report (RCOAT_MIGRATION_24) of COAT version 2.3 or earlier and the report for the initialization (RCOATCRE).

To avoid the unintentional deletion of COAT change documents, the entry COAT_TOOLBOX_TREE - CDOC_DELETE_REMOVE should also continue to have the flag set to the value "X". The report for the reorganization of change documents (RCOAT_CDOC_REORG) is thus hidden.

All table entries can be activated again at any time by deleting the respective flags.
After completing the COAT system setup, the COAT_FLAGS table should contain the following values:

<table>
<thead>
<tr>
<th>Key1</th>
<th>Key2</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>COAT</td>
<td>CHANGE_DOC_EXCLUDE</td>
<td></td>
</tr>
<tr>
<td>COAT</td>
<td>CHANGE_DOC_LINK</td>
<td>X</td>
</tr>
<tr>
<td>COAT</td>
<td>CHANGE_DOC_LTEXT</td>
<td>X</td>
</tr>
<tr>
<td>COAT</td>
<td>STEXT_DEFAULT</td>
<td></td>
</tr>
<tr>
<td>COAT</td>
<td>VARIANT_TRANS_DEFAULT</td>
<td>X</td>
</tr>
<tr>
<td>COAT_TOOLBOX_TREE</td>
<td>CDOC_DELETE_REMOVE</td>
<td>X</td>
</tr>
<tr>
<td>COAT_TOOLBOX_TREE</td>
<td>MIGRATION_REMOVE</td>
<td>X</td>
</tr>
<tr>
<td>RCOAT_FILL_ATTRIB_EXTERN</td>
<td>AUTH_ACTVT</td>
<td>02</td>
</tr>
<tr>
<td>RCOAT_FILL_COAT_CUST</td>
<td>AUTH_ACTVT</td>
<td>02</td>
</tr>
</tbody>
</table>

Table 24: COAT: Recommended Settings for Table COAT_FLAGS

5.6.2 DEFINITION OF ATTRIBUTES

SAP provides three predefined attributes:

- Tax-relevant
- Correction report
- Database changes

The values "Yes" or "No" can be maintained for each attribute.

From the perspective of DSAG, however, these three attributes are insufficient for a complete evaluation and are to be supplemented depending on the requirements of the individual taxpayer.

To start from a consistent point in this regard, DSAG recommends that the following attributes and default values be maintained (at minimum):
### a) General attributes:

<table>
<thead>
<tr>
<th>Source</th>
<th>Attribute No.</th>
<th>Attribute Name</th>
<th>Type</th>
<th>Export</th>
<th>Language</th>
<th>Attribute Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100</td>
<td>Limited to Org. unit</td>
<td>Boolean</td>
<td>1</td>
<td>DE EN</td>
<td>0</td>
<td>Nein No</td>
</tr>
<tr>
<td></td>
<td>110</td>
<td>BUK 1000 relevant</td>
<td>Boolean</td>
<td>1</td>
<td>DE EN</td>
<td>0</td>
<td>Nein No</td>
</tr>
<tr>
<td></td>
<td>120</td>
<td>BUK 2000 relevant</td>
<td>Boolean</td>
<td>1</td>
<td>DE EN</td>
<td>0</td>
<td>Nein No</td>
</tr>
<tr>
<td></td>
<td>130</td>
<td>BUK 3000 relevant</td>
<td>Boolean</td>
<td>1</td>
<td>DE EN</td>
<td>0</td>
<td>Nein No</td>
</tr>
<tr>
<td></td>
<td>130</td>
<td>BUK 3000 relevant</td>
<td>Boolean</td>
<td>1</td>
<td>DE EN</td>
<td>0</td>
<td>Nein No</td>
</tr>
<tr>
<td></td>
<td>300</td>
<td>Process owner/Business area owner</td>
<td>String</td>
<td>1</td>
<td>DE EN</td>
<td>PV1</td>
<td>Name PV 1</td>
</tr>
<tr>
<td></td>
<td>305</td>
<td>IT owner</td>
<td>String</td>
<td>1</td>
<td>DE EN</td>
<td>IT1</td>
<td>Name of IT 1</td>
</tr>
<tr>
<td></td>
<td>340</td>
<td>Date reminder</td>
<td>Date</td>
<td>1</td>
<td>DE EN</td>
<td>No default values</td>
<td></td>
</tr>
</tbody>
</table>

Table 25: COAT: Default Customer Attributes – General

---

313 Adjustment to the company codes actually used in the company is required.
314 Concept for the extension of DART in the case of tax relevance.
b) Attributes only for tables/includes/appends:

<table>
<thead>
<tr>
<th>Source</th>
<th>Attribute no.</th>
<th>Attribute name</th>
<th>Type</th>
<th>Export</th>
<th>Language</th>
<th>Attribute value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer</td>
<td>200</td>
<td>Data type</td>
<td>String</td>
<td>1</td>
<td>DE</td>
<td>B</td>
<td>Bewegungsdaten Transactional data</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EN</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>210</td>
<td>Only temporary data</td>
<td>Boolean</td>
<td>1</td>
<td>DE</td>
<td>0</td>
<td>Nein No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EN</td>
<td>1</td>
<td>Ja Yes</td>
</tr>
<tr>
<td></td>
<td>220</td>
<td>Data content (special)</td>
<td>String</td>
<td>1</td>
<td>DE</td>
<td>I</td>
<td>Index data</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EN</td>
<td>J</td>
<td>Ja (Details zu klären) Yes (to be clarified)</td>
</tr>
<tr>
<td></td>
<td>230</td>
<td>Data for technical control</td>
<td>Boolean</td>
<td>1</td>
<td>DE</td>
<td>0</td>
<td>Nein No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EN</td>
<td>1</td>
<td>Ja Yes</td>
</tr>
<tr>
<td></td>
<td>320</td>
<td>Inclusion in DART</td>
<td>Boolean</td>
<td>1</td>
<td>DE</td>
<td>0</td>
<td>Nein No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EN</td>
<td>1</td>
<td>Ja Yes</td>
</tr>
<tr>
<td></td>
<td>330</td>
<td>DART segment name</td>
<td>String</td>
<td>1</td>
<td>DE</td>
<td></td>
<td>No default values</td>
</tr>
</tbody>
</table>

Table 26: COAT: Default Customer Attributes – Tables, Appends, Includes
c) Attributes only for programs

<table>
<thead>
<tr>
<th>Source</th>
<th>Attribute no.</th>
<th>Attribute Name</th>
<th>Type</th>
<th>Export</th>
<th>Language</th>
<th>Attribute value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer</td>
<td>240</td>
<td>Type of program</td>
<td>String</td>
<td></td>
<td>DE EN C</td>
<td></td>
<td>Korrekturprogramm Correction/update report</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DE EN M</td>
<td></td>
<td>Migrationsprogramm Migration report</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DE EN A</td>
<td></td>
<td>Auswertungsprogramm Analysis report</td>
</tr>
<tr>
<td></td>
<td>360</td>
<td>Assigned transaction</td>
<td>Boolean</td>
<td></td>
<td>DE EN P</td>
<td></td>
<td>Datenbeschaffung für Formulare</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DE EN E</td>
<td></td>
<td>Data collection for forms</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DE EN I</td>
<td></td>
<td>Export/download program</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Data export/download report</td>
</tr>
<tr>
<td></td>
<td>350</td>
<td>Name of role</td>
<td>String</td>
<td></td>
<td></td>
<td></td>
<td>Import/download program</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Data import/upload report</td>
</tr>
</tbody>
</table>

The fields for "automatically filled" and "cannot be changed manually" must not be filled for customer attributes.

The field "Mandatory attribute" was introduced with COAT 2.3. It should remain set to "Initial" during initial maintenance. This value can be set to "Warning" or "Error". Setting it to "Error" prevents the saving of the complete data record if the respective mandatory attribute is not filled.
The release of COAT 2.4 will enable authorization assignment at the individual attribute level, as well. It will thus be possible to distribute maintenance activities among different responsibilities via authorization control.

5.6.3 SELECTION OF RELEVANT NAMESPACES IN THE CUSTOMER SYSTEM

Usually, customer developments should start in the "Z" namespace and those of partners with "Y". Since SAP has provided customers/partners with the option of requesting their own namespaces, objects that start with "/" are also relevant. SAP also delivers objects starting with "/" in its standard systems.

The tables TRNSPACET/TRNSPACETT can be used to evaluate the namespaces that are entered in SAP. Here, all namespaces that are marked with "X" in the column SAPFLAG are not customer namespaces. By implication, however, it cannot be said that all namespaces without "X" in the field SAPFLAG are customer/partner namespaces. Here, each namespace must be checked to determine whether the objects that are created in it were generated by SAP, a partner, or the customer itself.

Unfortunately, it is also possible to import objects from a "/" namespace into an SAP system even when the namespace itself was not created/imported in the relevant SAP table.

**PRACTICAL TIP:**

With regard to "/"objects whose namespace is not available in the system, it is also necessary to analyze the source tables of the respective Dictionary object (for tables/appends/includes, for example, in DD02L \[^{315}\] ) in order to determine whether they list objects whose namespace was not previously determined.

This results in the list of namespaces that were not delivered by SAP in the taxpayer’s system and thus require further consideration of their tax relevance.

\[^{315}\] The source table for programs is TADIR.
5.6.4 DATA MAINTENANCE

5.6.4.1 Object Types in COAT

The following object types are currently supported:

- Object types with direct tax relevance
  - Tables (TABL)
  - Appends (APPD)
  - Includes (INCL)
  - Programs (PROG)
  - Transactions (TRAN)
- Other object types (cannot be called directly)
  - Function modules (FUNC)
  - Classes (CLAS)
  - Methods (METH).

**PRACTICAL TIP:**

To ensure that you do not have to re-enter the whole list of namespaces for each new selection in COAT, we recommend that you create it once for each object type and save it as a variant.

5.6.4.2 Selection of Objects from SAP Repository

The system displays all objects from the SAP Repository that match the selection criteria. The data management objects and directly executable objects should be determined at the very least. This can be achieved by selecting the appropriate options when selecting:

- Programs: "Only executable programs"
- Tables, appends, includes: "Only transparent tables"
If a comprehensive evaluation and documentation of all objects is desired, it is not necessary to select these options.

The selected objects can have the following status:

- **Does not yet exist in COAT**
  
  These objects were not yet included in COAT

- **No attribute assignment exists**
  
  These objects were previously imported into COAT, but not processed further

- **Attribute assignment is not up-to-date**
  
  The assessment of these objects was already performed once. However, the object was changed in the meantime in the Repository. The assessment must be re-viewed.

- **Attribute assignment is up-to-date**
  
  The assessment of these objects was already performed once and is still up-to-date.

Objects that do not yet exist in COAT are to be imported to COAT. Further processing then occurs in the "COAT Data" area.

Here, it is possible to assign attributes individually to the objects. In addition to the attributes, you can create short individual reasons for the documentation/evaluation that occurred (Long Text tab). You also have the option of adding a link to already existing documentation on the object (Link tab). If these links can be accessed from the SAP system, the referenced document can be displayed directly in the SAP GUI or via an external viewer.

Since the initial processing can be relatively time-consuming, the mass import option was created. This can occur via the MS EXCEL® template described in Chapter 5.6.4.3 or via the mass maintenance function delivered with COAT 2.3.

With this new function, the following activities (among others) can be executed:

- Assign values to groups of objects
- Add new attributes to objects
- Replace existing values with new values.
5.6.4.3 Maintenance via MS EXCEL® Template /Upload

For the creation of a template for mass maintenance in MS EXCEL® up to and including COAT 2.2, 2.3, and 2.4, a template for each case is included as an attachment to SAP Note 1567990 316. These templates contain the standard SAP attributes and placeholders for customer values.

During maintenance in the MS EXCEL® template, you must consider that the technical values stored in customizing are to be maintained, not the names displayed in the application. During uploading, the values are checked against the customizing so that no incorrect values can be transferred.

5.6.4.4 Recording Change Documents

As of COAT 2.4, change documents are written for all activities once the corresponding object has been included in COAT management. This includes all new entries and the maintenance/change/deletion of attribute assignments (as well as that of entire objects).

These change documents are managed in COAT 317 and can be displayed there for the individual object at hand.

5.6.4.5 Transport Link (SAP Transport System)

Data is usually maintained in the development system in COAT. COAT provides the option of selectively including these values via the manual transport link in a Workbench transport, which in turn makes it possible to import them as documentation into the subsequent systems.

Here, selecting objects which do not yet exist in the production system does not pose a problem because the values in COAT are managed independently. The values cannot be displayed until the corresponding objects have also been imported.

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316 Cf. SAP Note 1567990 – COAT: Importing the attributes from Excel®.
317 Management is handled in COAT itself, not in the central change document collection (tables CDHDR and CDPOS).
5.6.5 EVALUATION (Z2/Z3 ACCESS)

The design of the COAT interface is technical in nature. In light of this, we recommend viewing and explaining the data in the production system (Z2 access) together with an external auditor.

In addition, COAT makes it possible to create a COAT extract. This COAT extract can then be exported in the SAP audit format to create a data medium. The external auditor can then import the data into IDEA® (Z3 access).

5.6.6 AUTHORIZATIONS

You can manage the individual COAT functions via the following authorization objects.
5.6.7 SAP DOCUMENTATION

SAP has provided a more detailed description in COAT 2.2. This can be found as an attachment to SAP Note 1783942.\footnote{Cf. SAP Note 1783942 – COAT: Enhancements 2.2.}

If more up-to-date documents are available at a later date, they will be found in the respective release notes of COAT.

\footnote{Cf. SAP Note 2235263 – COAT: Enhancements 2.4.}
5.7 ARCHIVE INFORMATION SYSTEM (AS)

The Archive Information System (AS) is used by many standard applications as a reference for quick access to individual archived documents. It is usually created during the implementation of SAP data archiving. The standard archive information structures provided by SAP typically serve as the underlying foundation.

These structures include at least the document information necessary to clearly access a document. In an accounting document, this includes the company code, the document number, and the fiscal year; for a sales order, only the sales and distribution document number is required. This minimum information is supplemented by a reference to the archiving run with the file number in the run, as well as the offset of the document in the referenced archive file.

Key search criteria have been added to some of the delivered archive information structures. These include the accounts receivable, accounts payable, and G&L account numbers for the accounting documents, or the document date and the sales organization (among other data) for the sales and distribution documents.

During an archiving project, you then check whether this information is sufficient or regular searches must be made for further criteria due to daily business reasons. However, this is always done on the premise that as few fields as possible will be supplemented. Each field that is supplemented in this way ultimately detracts from the desired success of the archiving project. Although the data of the archive information structures is not filed in the original tables of the documents, they are still filed in their own tables of the SAP database, for which means corresponding space must be kept available.

5.7.1 PREREQUISITES

The following list may be incomplete and need to be supplemented in some cases due to the use of existing heterogeneous system landscapes.

Initial situation for follow-up extraction:

- Tax-relevant data does not exist in the DART extract
- The external auditor insists on digital Z3 access
- DART 2.2 or later is in use
- The SAP data archiving was performed in the audited SAP system
• The SAP system used must be running R/3 4.6C or later
• The SAP system which was used for archiving must still be in operation
• The missing data must have been archived directly from transparent tables
• And other factors.

Implementation of follow-up extraction:

• Follow-up extraction of missing data content entails a financial expense
• The scope of the technical and financial expenses involved in follow-up extraction depends on company-specific circumstances, for example:
  • Number of systems, structure of landscape
  • Scope of archived data
  • Database system used
  • Available disk space in the database system
  • Availability of an archiving specialist

Follow-up extraction is not possible if:

• The missing data has been archived via archiving classes (for example, change documents)

5.7.2 ARCHIVE INFORMATION SYSTEM

5.7.2.1 Basics

Each archive information structure is based on a predefined field catalog. The available fields are defined and the dependencies between header and detail fields determined in this catalog. Here, you must ensure that all relevant relations are entered so that access will work correctly and efficiently later on.

Another important thing to bear in mind is that only fields from tables that are archived directly as tables can be included. You cannot include fields from tables that are archived via archiving classes. These include SAPscript texts and change documents, for example.
5.7.2.2 Initial Situation

DART extracts have been created. During an external audit, the fields ANLN1, ANLN2 and STCEG from the BSEG table (DART segment TXW_FI_POS) are required, but they are not included in the present extract (for whatever reason). In the standard system, these fields are available in DART 2.2 and later. Due to SAP data archiving that has already occurred, the extract cannot be created again.

In the course of SAP data archiving, the archive information structure SAP_FI_DOC_002 (item key and reference) was activated for the archiving object FI_DOCUMNT (accounting documents) based on the field catalog SAP_FI_DOC_002 (FI document by account). The created database table is called ZARIXFI1.

5.7.3 EXTENDING/REBUILDING ARCHIVE INFORMATION STRUCTURES

5.7.3.1 Field Exists in the Field Catalog

During the audit of the archive information structure that was used, the audited company determines that the two fields ANLN1 (main asset number) and ANLN2 (asset subnumber) required by the auditor exist in the field catalog SAP_FI_DOC_002 (which is also in use). As a result, you can choose from two procedures:

a) Rebuilding the archive information structure with the addition of the two fields
b) Building a temporary archive information structure for the external audit

Since the audited company does not need to permanently include the two fields in the archive information structure in the future, variant a) is not a viable alternative. The procedure for b) is thus described below.

The actions described below first have to be performed in the development system and then pushed by transport to the production system.

Transaction SARI:

Figure 44: Creating an Archive Information Structure: Transaction SARI
Creating a new archive information structure:

**Figure 45:** Creating Archive Information Structure: Definition

After you click Create, the transfer order is read. In this example, it is assumed that a separate package (development class) was created for the activities in data archiving during the archiving project.

**Figure 46:** Creating an Archive Information Structure: Package/Transport Assignment

As a result, the system displays the created information structure with key fields already selected for the document at hand.

**Figure 47:** Creating an Archive Information Structure: Key Fields
You must now search for the required fields in the right-hand list. To add them to the selection, you must select them and click the arrow to the left.

Figure 48: Creating an Archive Information Structure: Selection of Other Fields

Figure 49: Creating an Archive Information Structure: Finishing Up

Then save the changes.

If the database system in use supports it, another separate data type can be assigned in the "Technical Data" area, which then ensures that the data in this archive information structure can be filed in a separate tablespace; this means it can be completely deleted upon completion of the audit.
You must now activate the information structure. This should be done in the same order on all systems in the landscape so that the generated database tables have the same code number for each module. For this purpose, you must select the option RM (retention management) if it is also offered.

Figure 50: Creating an Archive Information Structure: Archiving

During activation, the name ZARIXFI3 was assigned to the generated database table.

Figure 51: Creating an Archive Information Structure: Table for Structure

Finally, structuring the data is the only thing left to be done:

Figure 52: Creating an Archive Information Structure: Status Management
Status Management:

For structuring, the newly defined information structure must be selected and the process started as a batch job.

If the data in the new structure was successfully assembled, a green traffic light will appear.

The information thus generated from the archive can now be made available for downloading and external auditing. Along with the two new fields, you must ensure that the key fields of the table are also transferred to enable assignment of the data to the data that was already transferred to the external auditor in the evaluation tool.
5.7.3.2  Field Catalog Extension

When auditing the available archive information structures and field catalogs, the audited company determines that the field STCEG (EC VAT ID number) required by the auditor is not defined in any of the available field catalogs for the archiving object FI_DOCUMNT. The decision has thus been made to copy the field catalog SAP_FI_DOC_002 (FI document by account) to the customer namespace and add the required field.

Transaction SARI:

First, the field catalog must be created in the customer namespace.

Selection of the field catalog SAP_FI_DOC_002 as the basis for the new field catalog

After the copy process, the field catalog must still be renamed to ZFI_DOC_002.
The next step involves double-clicking to branch to the field selection for the selected field catalog.

As soon as you have made note of the highest field number assigned thus far, you can start entering the new field.

The added field is a field of the database table BSEG, which was already part of the information structure.

If you need to include fields from database tables which were not previously part of the field catalog, you must also establish a relationship to one of the existing tables.

In this field catalog, the database table BSEG is the leading table and other fields from the document header table BKPF have been added.
You must now use additional source data fields to define relationships for all common key fields with the other table, BKPF. The common fields of BSEG and BKPF are BUKRS, BELNR and GJAHR, while BUZEI is found only in the table BSEG.

Finally, everything must be saved, assigned to a package, and included in a transport.

The rebuilt field catalog is now the basis for an archive information structure that needs to be created. Here, you can proceed as described in Chapter 5.7.2.2.

5.7.3.3 Field Catalog Does Not Exist

If none of the field catalogs in the system prove to be appropriate for the respective archiving object, creating a separate field catalog is the only solution.

This requires in-depth knowledge of the respective archiving object, tables, and function of the respective application, as well as of the function and structure of the archive information system. This is the only way to ensure that a functional field catalog is built as the basis for an archive information structure that needs to be created.

The description of this procedure is beyond the scope of this documentation, which is why no more detailed illustrations are included. SAP regularly offers multi-day courses (BC660/BC670) that provide the relevant knowledge.
5.8 SAP HUMAN CAPITAL MANAGEMENT

Payroll accounting is performed in SAP in the Human Capital Management (HCM) module, which was formerly known as HR (Human Resources).

In the range of topics involved in data access GoBD/GDPdU within the SAP world, HCM occupies a special position. The Interface Toolbox (transaction PU12) is available for this application. Due to reasons of data protection and the usually small datasets involved, HCM was not included in the DART tool. Adjustments are coordinated between WG Data Access (SIG Taxes) and WG Payroll D, Reporting (SIG Human Resources).

Before considering the technical aspects, it should be noted that the auditing actions for income tax audits are also always performed outside of payroll. The fiscal authorities usually check financial accounting for circumstances which are to be considered as imputed income in payroll – for example, use of company car, gifts to employees above the value limits, and employee discounts.

5.8.1 DIRECT ACCESS (Z1 ACCESS)

The auditor role SAP_AUDITOR_TAX_HR is available for HCM just as for FI, MM, SD, and other modules. The transactions contained in the role also support periodic restriction of auditor authorization to specific fiscal years, as well as the action log. Supplementary notes on the authorization role of external auditors in relation to HCM data are to be observed.

On SAP Service Marketplace (support.sap.com/notes), relevant SAP Notes can be found for HCM under the components PY-DE-NT-TX and CA-GTF-GDP.

5.8.2 DATA MEDIUM TRANSFER (Z3 ACCESS)

SAP HCM has long provided a flexible extraction tool, the Interface Toolbox (transaction PU12).

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320 Cf. Chapter 5.2.3.
321 Cf. SAP Note 445148 – Access by tax authorities to stored data.
322 Cf. SAP Note 529251 – GDPdU: Logging accesses (action log) and 677249 – Tax Audit: Log function direct access.
323 Cf. SAP Notes 662805 – Tax Audit: direct access and 776038 – Tax Audit: Enhancements because of ELSTER.
SAP HCM development has delivered a sample interface format (DAO0). According to feedback from income tax audits, adjustments of this sample format are usually necessary in practice.

As agreed between WG Data Access and WG Payroll D, as well as in consultation with the fiscal authorities, a DSAG development request was submitted that involves including the following infotypes in the sample format DAO0:

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>Actions</td>
</tr>
<tr>
<td>0001</td>
<td>Organizational assignment</td>
</tr>
<tr>
<td>0002</td>
<td>Personal data</td>
</tr>
<tr>
<td>0003</td>
<td>Payroll status</td>
</tr>
<tr>
<td>0006</td>
<td>Addresses</td>
</tr>
<tr>
<td>0007</td>
<td>Planned working time</td>
</tr>
<tr>
<td>0009</td>
<td>Bank details</td>
</tr>
<tr>
<td>0010</td>
<td>Capital formation</td>
</tr>
<tr>
<td>0011</td>
<td>External transfers</td>
</tr>
<tr>
<td>0013</td>
<td>Social insurance D</td>
</tr>
<tr>
<td>0016</td>
<td>Contract elements</td>
</tr>
<tr>
<td>0017</td>
<td>Travel privileges</td>
</tr>
<tr>
<td>0020</td>
<td>DEUEV</td>
</tr>
<tr>
<td>0021</td>
<td>Family member/dependents</td>
</tr>
<tr>
<td>0023</td>
<td>Other/previous employers</td>
</tr>
<tr>
<td>0027</td>
<td>Cost distribution</td>
</tr>
<tr>
<td>0031</td>
<td>Reference personnel numbers</td>
</tr>
<tr>
<td>0037</td>
<td>Insurance</td>
</tr>
<tr>
<td>0045</td>
<td>Loans</td>
</tr>
<tr>
<td>0053</td>
<td>Company pension</td>
</tr>
<tr>
<td>0057</td>
<td>Membership fees</td>
</tr>
<tr>
<td>0078</td>
<td>Loan payments</td>
</tr>
<tr>
<td>0121</td>
<td>RefPerNo priority</td>
</tr>
<tr>
<td>0379</td>
<td>Stock purchase plans</td>
</tr>
<tr>
<td>0380</td>
<td>Compensation adjustment</td>
</tr>
<tr>
<td>0382</td>
<td>Award</td>
</tr>
</tbody>
</table>
The Interface Toolbox can export data by means of the XML description standard. The SAP Notes on downloading in batch mode and generating text tables are to be observed in addition to the XML file.

To create a file by means of the HCM Toolbox (transaction PU12), proceed as follows:

5.8.2.1 Step 1: Calling Transaction PU12 HR Interface Toolbox

Access via the SAP menu:
Human Resources → Payroll → Europe → Germany → Subsequent Activities → Period-independent → Data Access Sec. 147 AO → Disclosure (Z3)

Special calls for transfers of data media are summarized here for the tax auditor.

5.8.2.2 Step 2: Selecting the Data Format

Before the data format is determined, the amount of data to be evaluated and exported must be known in order to define the data fields for the extraction.

The system differentiates between

- Master data = Infotypes
- Transactional data = Cluster (encrypted tables).

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324 Cf. SAP Note 594048 – XML Data Description for Data Transfer
325 Cf. SAP Note 673829 – Tax Audit: Data Transfer: Download in Batch.
326 Cf. SAP Note 673235 – Tax Audit: Data Transfer: Text Tables.
"Configuration" tab, "Interface Format" field:

![Interface Toolbox: Format Selection](image)

Figure 64: Interface Toolbox: Format Selection

This predefined format contains default values for tax-relevant data\(^{327}\).

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\(^{327}\) Cf. Chapter 5.8.2.
The system then displays the table and field range of the standard data format delivered by SAP, DAO0:

- **PCL2**  RP cluster transactional (payroll results / time data)
- **MDTA**  Master data of Employees.

![Display interface format "DAO0" : data selection](image)

The icon in each line offers access to more selections based on the context at hand (for example, period selection for transaction data).
Example of a period selection dialog:

Figure 66: Interface Toolbox: Definition of Selection Periods

Figure 67: Interface Toolbox: Field Selection of Payroll Results

Using the icon , filter criteria can be assigned.
Example of a field selection for master data:

![Interface Toolbox: Field Selection for Master Data](image)

**5.8.2.3 Step 3: Adapting Predefined Data Formats for Infotypes and Clusters**

For individual adaptations of a predefined format, the output format must be copied to the customer namespace (data format names starting with "Z").

The copied format is adapted as needed.

- Deleting a whole area:
  Select a structure level by double-clicking it, then click the icon ![delete](image) (delete).

- Deleting one or more fields within a branch:
  Select fields to be deleted by double-clicking them, then click the icon ![delete](image) (delete).

- Including new infotypes or clusters
  Double-click an existing infotype or cluster and click the icon ![create](image) (create).

The system will display all existing infotypes or clusters which are currently not included in the data format, including customer-specific infotypes.
Infotypes from the selection list can be clicked to include them in the data format at hand.

- Including a new field in the infotype or cluster:
  Double-click an existing field in an infotype or cluster and click the icon (create).

  Data fields for this infotype or cluster can be clicked to transfer them from the selection list into the data format.
For example: Field for infotype:

![Figure 70: Interface Toolbox: Selection of Fields for an Infotype](image)

Newly created or changed objects must be transported from the test/quality assurance system to the production system.

### 5.8.2.4 Step 4: Generating Executable Program

All changes made to an existing data format (and instances of newly created data formats) must be generated for an executable program to ensure that it can be used for extraction. Without this generation, a new data format would not select any data, and an existing data format would select data according to the infotype and data field selection which existed prior to the last generation.
During the initial generation of a new data format, a pop-up will prompt you to enter a program name from the customer-specific namespace "Z". Either specify a customer-specific program name or use the button at the bottom of the pop-up to let the system generate a name.

5.8.2.5 Step 5: Performing Data Extraction

You can call the data extraction as follows:

Human Resources → Payroll → Europe → Germany → Subsequent Activities → Period-independent → Data Access Sec. 147 AO → Disclosure (Z3)

The following figure shows an example of filled selections:

- Pay.Area for TP
- Period
- Personnel number.
The selection is derived from the legal requirements of the external auditor.

Under <Options>: "Display Log" is selected in order to obtain a processing log. This log is used primarily for test purposes with few personnel numbers (less than 1,000). Since the system logs are highly detailed, they rapidly generate lists of 100,000 pages and more based on a full dataset, which places inordinate stress on the memory space of the print spooler.

Under <Export Options>, <Update> must be selected to create a file in the update run. Without <Update>, the program runs in test mode and does not create a file.
5.8.2.6 Step 6: Downloading the File to a Network Directory

The data extraction program creates a file (in this example: HR_PINTFS_000000146) and places it in the file directory (TemSe) within the SAP system.

You can download these files (a summary is contained in the file HR_PINTFN_LISTE) to the network or directly to a data medium (CD/DVD) with transaction:

\textbf{PC00_M01_RPCAODD0} Data Access Tax Audit: Download.

SAP recommends that this program only be used for downloading small datasets (for example, for test cases). The problem lies in the high memory requirements of the XML format, which is estimated to write up to 20 times more data than a simple text format.

If possible, larger datasets should be moved directly from the file system of the SAP server to a local data medium by means of the operating system. No file conversion should take place in this process.

The download consists of four components:

- The data files
- The Index.XML file (an index of all the data files)
- The file gdpdu-01-06-2003.DTD\textsuperscript{328} for interpreting the index file
- The SAP description document for interpreting specific data.

The current procedure is described in SAP Note 1355616\textsuperscript{329}.

5.9 TRAVEL EXPENSE SETTLEMENT (FI-TV)

Travel expense settlement is a topic that lies somewhere between FI and HCM in the SAP environment. It is currently assigned to the FI module (FI-TV). Technically, however, FI-TV still uses many HCM components.

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

\textsuperscript{328} The file extension DTD stands for Data Type Definition.

\textsuperscript{329} Cf. SAP Note 1355616 – Tax Auditor Data Transfer - Instructions.
It makes sense to handle travel expense accounting on the HCM system if employees normally assign their travel expenses to their master cost center. However, if travel expenses have to be entered on different CO objects (e.g. cost centers, orders, WBS elements) as is often the case with service providers, travel expense settlement is typically conducted on the SAP FI/CO system, with part of the HR master record being replicated on a separate SAP HCM installation.

5.9.1 Z1/Z2 ACCESS TO DATA FOR TRAVEL EXPENSE SETTLEMENT

Depending on which system has been selected for the installation of FI-TV, the auditor’s authorizations for Z1/Z2 access have to be set up on this system and period checking has to be activated.

5.9.2 DATA MEDIUM TRANSFER (Z3 ACCESS)

The current DART versions support data extraction from travel expense settlement.

5.10 INDUSTRY SOLUTIONS

5.10.1 CONTRACT ACCOUNTS RECEIVABLE AND PAYABLE FI-CA

DART is available in the standard system for extracting data from financial accounting and upstream modules.

If the industry solution Retail is used in conjunction with Contract Accounts Receivable and Payable, DART Note 1892650 provides the option of continuous extraction of the document chain within the DART standard.

When using Contract Accounts Receivable and Payable in the industry solutions listed below:

- IS-T Telecommunications
- IS-U Utilities
- FS-CD Insurance: Collections and Disbursements
- IS-M Media (FI-CA optional for IS-M/SD)
- IS-PS Public Sector (FI-CA optional)

Cf. SAP Note 1892650 – FTW1A: SD billing documents when using FI-CA.
... extractors are available (in addition to DART) which were designed specifically for mass processing of the following data:

- Business partner data
- Customizing
- SD documents.

5.10.2 REAL ESTATE (RE/RE-FX)

Evaluation options are available in the DART standard.

5.10.3 DISCRETE INDUSTRIES

Long material numbers are also evaluated in the DART standard. At present, no further enhancements are available.

5.10.4 MEDIA

For the modules:

- IS-M-AM  Media – Advertising Management
- IS-M-SD  Media – Sales and Distribution

... enhancements are available in the DART standard 331.

331 Cf. SAP Notes:
- 573140 – IS-M: Conversion of tax reduction law
- 600208 – IS-M DART Downgrade
- 605074 – M/AM: DART: Contract settlement item not extracted
- 609952 – IS-M: DART: Short dump with data extraction
- 680925 – M/SD, DART: docs from BTCI cannot be extracted
- 748353 – IS-M/SD: Optional database index for table JFRK
- 853775 – M/SD: DART: Segments extracted even if not selected
- 857512 – M/AM: DART: Segments extracted even if not selected
5.10.5 UTILITIES/TELECOMMUNICATIONS

DART is available in the standard system for the extraction of data from financial accounting and upstream modules.

In addition, extractors for Contract Accounts Receivable and Payable (cf. Chapter 5.10.1) and the following data are available in IS-U/IS-T:

- Print documents
- Billing documents
- Simulation documents
- Bill processing by third parties.

For this purpose, SAP provides its current cookbook, "Extractors in SAP IS-U/CCS for the Fulfillment of GDPdU" (version 5, March 2009) on SAP Service Marketplace: https://service.sap.com/~sapidb/012002523100009258352010D/Cookbook_GDPdU_032009_DE.pdf

5.10.6 MISCELLANEOUS

No extensions for DART or application-specific evaluation options are currently available for industry solutions not mentioned here.

If there is a need for a solution in practice, the relevant DSAG Special Interest Group and WG Data Access accept suggestions on extending the scope of delivery in order to discuss them with SAP.

5.11 SAP BUSINESS ONE

5.11.1 DIRECT/INDIRECT ACCESS (Z1/Z2)

SAP Business One does not contain any predefined auditor roles. Each company should develop the authorizations as solely display authorizations for the relevant areas.
### 5.11.2 DATA MEDIUM TRANSFER (Z3)

For Z3 access, a solution based on queries for SAP Business One is available.

As of October 8, 2015, this includes the following queries:

<table>
<thead>
<tr>
<th>Query No.</th>
<th>Description</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>01_GDPDU_Query_Customer Data</td>
<td>Detailed information on customers who have postings in the system during the selected period</td>
</tr>
<tr>
<td>2</td>
<td>02_GDPDU_Query_Vendor Data</td>
<td>Detailed information on vendors who have postings in the system during the selected period</td>
</tr>
<tr>
<td>3</td>
<td>03_GDPDU_Query_Account Details</td>
<td>Detailed information on G/L accounts which have postings in the system during the selected period</td>
</tr>
<tr>
<td>4</td>
<td>04_GDPDU_Query_Journal Entries</td>
<td>Detailed information on journal entries which have postings in the system during the selected period</td>
</tr>
<tr>
<td>5</td>
<td>05_GDPDU_Query_Tax Group Details</td>
<td>Details of the tax groups created and used in the system</td>
</tr>
<tr>
<td>6</td>
<td>06_GDPDU_Abfrage_Cost Center Details</td>
<td>Details of the cost centers and splitting rules created and used in the system</td>
</tr>
<tr>
<td>7</td>
<td>07_GDPDU_Query_Project Details</td>
<td>Information on the projects created and used in the system</td>
</tr>
<tr>
<td>8</td>
<td>08_GDPDU_Query_Outgoing Invoices</td>
<td>Detailed information on journal entries which were reported in query 4 and are based on the outgoing invoice. The query clearly shows which item in the details is linked to the revenue posting item.</td>
</tr>
<tr>
<td>9</td>
<td>09_GDPDU_Query_A/R Credit Memos</td>
<td>Detailed information on journal entries which were reported in query 4 and are based on A/R credit memos. The query clearly shows which item in the details is linked to the revenue posting item.</td>
</tr>
<tr>
<td>10</td>
<td>10_GDPDU_Query_Incoming Payments</td>
<td>Detailed information on journal entries which were reported in query 4 and are based on the incoming payments</td>
</tr>
</tbody>
</table>

332 Cf. SAP Notes 1012531 – GDPDU in Business One, Version 27.
<table>
<thead>
<tr>
<th>Query No.</th>
<th>Description</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>11_GDPDU_Query_A/P Invoices</td>
<td>Detailed information on journal entries which were reported in query 4 and are based on A/P invoices. The query clearly shows which item in the details is linked to the revenue posting item.</td>
</tr>
<tr>
<td>12</td>
<td>12_GDPDU_Query_A/P Credit Memos</td>
<td>Detailed information on journal entries which were reported in query 4 and are based on A/P credit memos. The query clearly shows which item in the details is linked to the revenue posting item.</td>
</tr>
<tr>
<td>13</td>
<td>13_GDPDU_Query_Outgoing Payments</td>
<td>Detailed information on journal entries which were reported in query 4 and are based on the outgoing payments.</td>
</tr>
<tr>
<td>14</td>
<td>14_Trial Balance_Accounts</td>
<td>Trial balance with account selection</td>
</tr>
<tr>
<td>15</td>
<td>15_Trial Balance_BP</td>
<td>Trial balance with business partner selection</td>
</tr>
<tr>
<td>16</td>
<td>List of original document types</td>
<td>This is available as textual information in the attachment to the SAP Note.</td>
</tr>
</tbody>
</table>

Table 30: SAP Business One: Evaluations for Data Access GoBD/GDPdU

If necessary, these queries are to be imported into the system and executed as described in the attachment of the aforementioned SAP Note 332.

If the extraction scope provided in the standard system is insufficient, you can supplement it as required with your own evaluations.

If there is a need for the queries to be extended, WG Data Access and the relevant DSAG Special Interest Group "Business One in the Group" accept suggestions on extending the scope of delivery in order to discuss them with SAP.

**5.12 SAP BUSINESS BYDESIGN**

**5.12.1 DIRECT/INDIRECT ACCESS (Z1/Z2)**

In SAP Business ByDesign, there are no predefined auditor roles. Each company should develop the authorizations purely as display authorizations for the relevant areas.
5.12.2 DATA MEDIUM TRANSFER (Z3)

SAP delivers a reporting package which contains reports from external and internal accounting. Depending on what data is to be extracted, the standard reporting package can be used. Otherwise, a customer-specific reporting package must be created or the standard package extended.

The standard reporting package includes the following evaluations:

<table>
<thead>
<tr>
<th>Sequence No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Document journal</td>
</tr>
<tr>
<td>2</td>
<td>Trial balance</td>
</tr>
<tr>
<td>3</td>
<td>Customers – Account balances</td>
</tr>
<tr>
<td>4</td>
<td>Vendors – Account balances</td>
</tr>
<tr>
<td>5</td>
<td>Vendors – Open items</td>
</tr>
<tr>
<td>6</td>
<td>Customers – Open items</td>
</tr>
<tr>
<td>7</td>
<td>G/L accounts – Postings</td>
</tr>
<tr>
<td>8</td>
<td>Asset history sheet</td>
</tr>
<tr>
<td>9</td>
<td>Assets – postings</td>
</tr>
<tr>
<td>10</td>
<td>Material inventories – asset list</td>
</tr>
<tr>
<td>11</td>
<td>VAT calculation – details</td>
</tr>
</tbody>
</table>

Table 31: SAP Business ByDesign: Evaluations for Data Access GoBD/GDPdU
6. OUTLOOK

After many years of discussion in the related literature, many important issues have been settled between the fiscal authorities and taxpayers. Nevertheless, responsibilities may still need to be clarified in certain cases, which will lead to discussions involving taxpayers, software vendors, and the fiscal authorities.

The variety of IT systems available and their often extensive functional scopes remain a major challenge for external auditors, the fiscal authorities in general, and taxpayers. Depending on the perspective of an external auditor or taxpayer, pragmatic solutions for specific operational situations will need to be renegotiated on a regular basis.

From previous audit experience, we have recognized that IT systems with extensive functional scopes (such as SAP systems) generate data in complex processes that are not (or at least not primarily) designed to provide access to tax-relevant data.

If data is transferred via temporary intermediate datasets for downloading outside of ERP systems and is then reassembled as a single image at a later time for external auditing, this results in a large number of interdependencies. The complexity in the interaction of data from different sources has to be controlled by the taxpayer and external auditor in order to rapidly achieve consistent results in the audit situation at hand. External auditors and taxpayers repeatedly test the limits of such systems when it comes to understanding every last historical ramification of previous data configurations. The question of the proportionality of measures has arisen repeatedly and will continue to be a frequent central topic.

The functions of SAP systems, which are already very extensive, will continue to develop. New problems also continue to emerge which were previously unknown and are not optimally solved by the current functions available. WG Data Access is aware of this challenge, which is why it remains actively engaged in shaping the progress of data access solutions. We hope that the information gained in actual audits will ultimately encourage the legislature and fiscal authorities to adapt their statements and instructions on IT-based auditing based on solutions that work in practice.

Representatives of the fiscal authorities often point out that they attach major importance to the documentation of the procedures and processes used by the taxpayer in preparing and performing audits involving data access. In Germany’s federal states, various questionnaires are sent to taxpaying companies (along with their audit directives) on the procedures they use and the related existing documentation.

In practice, it is often the case that such documentation does not exist at a company, or only in inadequate and/or obsolete form.
Here, we want to make it abundantly clear that the documentation of procedures and processes has already been binding since 1995 as a result of the GoBS and was updated in the GoBD. Furthermore, new legal regulations have been added in recent years which also require procedural documentation. Every taxpayer must thus expect to be increasingly asked for procedural documentation (within the meaning of Section 193 of AO) during future external audits.

We have done our best to highlight all of the legal regulations concerning data access in the broadest sense that were in place when this documentation was written. When this documentation was completed, other topics (including the following) existed only as drafts of the Federal Ministry of Finance, the Federal Cabinet, the Federal Parliament, and the Federal Council, but had not yet been adopted or signed by the Federal President:

- Draft of a law on preventing the manipulation of digital basic records
- Technical regulation on the implementation of the law preventing the manipulation of digital basic records
- The previously voluntary application of the "Digital Payroll Interface" (DLS in German), which will be legally required for taxpayers during income tax audits from January 1, 2018 as part of the act passed on modernizing taxation procedures.

Insofar as these provisions are adopted at a later date, we will include them in the next revision of our recommendations.
7. ATTACHMENT

7.1 LITERATURE LIST

(This list is not exhaustive.)

Michael Baum
Grundsätze zum Datenzugriff und zur Prüfbarkeit digitaler Unterlagen (GDPdU),

BITKOM
Leitfaden zum elektronischen Datenzugriff der Finanzverwaltung
Steuerrechtliche Anforderungen und Technologien zur Datenaufbewahrung,
Dated: June 2003.

Präsidium der Bundessteuerberaterkammer
Empfehlungen der Bundessteuerberaterkammer zum Verhalten bei der edv-gestützten
Betriebsprüfung,

Claus Dalinghaus
Digitale Betriebsprüfung bei SAP® und R/3®-Buchführungssystemen,
StB 2003, Heft 4, pages 141 – 149.

Dr. Xaver Ditz
Reichweite des digitalen Datenzugriffs der Finanzverwaltung im nationalen und interna-
tionalen Konzern,

Stefan Groß, Dr. Ulrich Kampffmeyer, Philipp Matheis
Die Vorbereitung auf die digitale Außenprüfung – Lösungsansatz,

Stefan Groß, Philipp Matheis, Bernhard Lindgens
Rückstellung für Kosten des Datenzugriffs der Finanzverwaltung,
DStR 2003, pages 921 – 927.

Stefan Groß
Die Anpassung der Unternehmens-EDV an die Vorgaben zum Datenzugriff
der Finanzverwaltung,
Andreas Hagenkötter, Dirk-Michael Mülot
Die Digitale Steuerprüfung – Neue Formen des Datenzugriffs der Finanzverwaltung ab dem 1. Januar 2002,

Bernd Hentschel (Hrsg.)
Digitale Betriebsprüfung,
Datenzugriff der Finanzverwaltung,
1. Auflage 2002,
2., überarbeitete Auflage 2004,
DATAKONTEXT Fachverlag, Frechen.

Jens Intemann, Thilo Cöster
Rechte und Pflichten bei der digitalen Außenprüfung –
Zugleich Besprechung des sogenannten Frage- Antwort-Katalogs des BMF,

Jens Intemann
The audit in the digital age; The new rights of the fiscal authorities to digital data access,

Dr. Ulrich Kampffmeyer, Bernhard Zöller
Die GDPdU und ihre Anforderungen zur elektronischen Archivierung,
Gemeinsame Stellungnahme,

Dieter Kempf
Digitale Außenprüfung: Die Vogel-Strauß-Politik hilft nicht weiter,
BB, 58. Jg., Heft 12, 19.03.2003, page I.

Christoph Kromer
StSenkG (Tax Reduction Act): Änderungen der AO zum Datenzugriff der Finanzverwaltung im Rahmen von Außenprüfungen,

Christoph Kromer
Datenzugriff der Finanzverwaltung auf die IT-Systeme des Unternehmens ab 2002:
Umfang und Lösungsansätze,
Dr. Otto-Ferdinand Graf Kerssenbrock, Olaf Riedel, Dr. Günther Strunk
Zur Verfassungsmäßigkeit des Datenzugriffs der Finanzverwaltung im Rahmen von Be-
triebsprüfungen nach § 147 Abs. 6 AO,
BB 2002, Beilage Nr. 9, Heft 49.

Rainer Kuhsel, Dr. Christian Kaeser
Bemerkungen zum BMF-Schreiben betreffend den Datenzugriff der Finanzverwaltung
ab 1.1.2002,

Dr. Harald Schaumburg
Der Datenzugriff und andere Kontrollmöglichkeiten der Finanzverwaltung,

Dr. Jens Schmittmann
„Der gläserne Steuerpflichtige?“ – Anmerkungen zu den Grundsätzen des BMF zum
Datenzugriff und zur Prüfbarkeit digitaler Unterlagen –,
WPg 2001, pages 1050 – 1057.

Schmitz, Stephan
Zweifelsfragen im Zusammenhang mit dem Zugriffsrecht der Finanzverwaltung auf DV-
gestützte Buchführungssysteme,

Dr. Tobias Taetzner, Thomas Büssow
Grundsätze zum Datenzugriff und zur Prüfbarkeit digitaler Unterlagen – Quo vadis?

Verband Organisations- und Informationssysteme e. V. (VOI) (Hrsg.)
Leitfaden für die Durchführung eines Projektes zur Abdeckung der Anforderungen der
Grundsätze zum Datenzugriff und zur Prüfbarkeit digitaler Unterlagen
Version 1.0 dated November 2003,

Institut der Wirtschaftsprüfer in Deutschland e. V. (Institute of Auditors in Germany)
IDW RS FAIT 1 „Grundsätze ordnungsmäßiger Buchführung bei Einsatz von Informati-

Institut der Wirtschaftsprüfer in Deutschland e. V. (Institute of Auditors in Germany)
IDW RS FAIT 2 „Grundsätze ordnungsmäßiger Buchführung bei Einsatz von Electronic
Institut der Wirtschaftsprüfer in Deutschland e. V. (Institute of Auditors in Germany)

Institut der Wirtschaftsprüfer in Deutschland e. V. (Institute of Auditors in Germany)

SAP SE

Henning Burlein, Roger Odenthal
Die neuen GoBD zur IT-gestützten Buchführung und zum Datenzugriff

Dr. Ulf-Christian Dißars
Die neuen Grundsätze für die elektronische Buchführung

Martin Engelberth
Datenzugriff und Aufzeichnungspflicht
NWB 2010, Heft 29, pages 2307 – 2316.

Dr. Oliver Geißler
Verzögerungsgeld bei Verletzung von Mitwirkungspflichten

Michael Goldshteyn, Stefan Thelen
Praxishandbuch digitale Betriebsprüfung: Anforderungen der neuen GoBD an Buchführung, Datenspeicherung und Datenzugriff,

Martin Henn
Verfahrensdokumentation nach den GoBD

Matthias E. Pfadler
Aufbewahrung von digitalen Belegen
Olaf Klingebiel
"Schlusspfiff beim Datenzugriff"

Andreas Wähnert
Gegenüberstellung alter und neuer Ansätze der Betriebsprüfung
NWB 2012, Heft 34, pages 2774 – 2782.

Dr. Karsten Webel, Andreas Wähnert
Der Verdacht einer Steuerstraftat während der Außenprüfung

Alexander von Wedelstädt
Die Änderungen der Abgabenordnung durch das Steuerhinterziehungsbekämpfungsgesetz

Dr. Reinhard Lange, Christian Rengier
Die Verlagerung der elektronischen Buchführung in das Ausland – zur Auslegung von § 146 Abs. 2a und 2b AO

Stefan Groß, Wolfgang Heinrich, Thorsten Brand, Christoph Möslein
Die GoBD in der Praxis - Ein Leitfaden für die Unternehmenspraxis – Version 1.9, Dated: March 13, 2017
http://www.psp.eu/media/allgemein/GoBD-Leitfaden_Version_2_3_FINAL.pdf.

Dr. Alexander Roßnagel, Dr. Stefanie Fischer-Dieskau, Silke Jandt
(Projectgruppe verfassungsverträgliche Technikgestaltung e.V.),
The document is no longer available on the ministry website. For more information, please see: http://www.securepoint.de/fileadmin/securepoint/downloads/uma/bmw-leitfaden.pdf.

Universität Kassel, Wissenschaftliches Zentrum für Informationstechnik-Gestaltung (ITeG),
Simulationsstudie Ersetzendes Scannen, 2014,
Bundesamt für Sicherheit in der Informationstechnik (BSI), Referat S 11 - Sicherheit in eID-Anwendungen,
Technische Richtlinie 03138 Ersetzendes Scannen (BSI TR-03138; RESISCAN), 2013,
7.2 SAP NOTES

(This list is not exhaustive.)

The following section lists some prominent SAP Notes on the issue of data access, along with corresponding cross-references.

**General Information:**
582583  DART version maintenance – DSAG application procedure

**Authorizations:**
115224  SAP Audit Log
451960  Audit Information System (AIS), role concept
445148  Access by tax authorities to stored data
529251  GDPdU: Logging access (action log)
662805  Tax audit: Direct access
677249  Tax audit: Protocol function, direct access
776038  Tax audit: Enhancements because of ELSTER
788313  Tax reduction law: Authorization check for customer-specific reports
798565  Programs containing checks on fiscal year
830736  Tax reduction act, Fi: Enhancement of SAP_AUDITOR_TAX role
925217  GDPdU: Access to RFUMSV00 by tax auditors
935189  GDPdU, enhancements in the composite role SAP_AUDITOR_TAX.
1058866  DART: Authorizations at extract level
2012390  Accounting error message not cleared on selecting order as direct material check box
**DART Versions:**

<table>
<thead>
<tr>
<th>Version</th>
<th>Upgrade From</th>
</tr>
</thead>
<tbody>
<tr>
<td>1050841, 1093942</td>
<td>Upgrade from DART 2.4 to DART 2.5</td>
</tr>
<tr>
<td>1173540</td>
<td>Upgrade from DART 2.5 to DART 2.6</td>
</tr>
<tr>
<td>1419580</td>
<td>Upgrade from DART 2.6 to DART 2.6e</td>
</tr>
<tr>
<td>1511234</td>
<td>Upgrade from DART 2.6e to DART 2.7</td>
</tr>
<tr>
<td>1993990</td>
<td>Upgrade from DART 2.7 to DART 2.7e</td>
</tr>
<tr>
<td>2239257</td>
<td>Upgrade from DART 2.7e to DART 2.8</td>
</tr>
</tbody>
</table>

**COAT Versions:**

<table>
<thead>
<tr>
<th>Version</th>
<th>COAT Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>1089923</td>
<td>COAT Version 2.0</td>
</tr>
<tr>
<td>1774507</td>
<td>Upgrade from COAT 2.0 to COAT 2.1</td>
</tr>
<tr>
<td>1783942</td>
<td>Upgrade from COAT 2.1 to COAT 2.2</td>
</tr>
<tr>
<td>1862736</td>
<td>Upgrade from COAT 2.2 to COAT 2.3</td>
</tr>
<tr>
<td>2235263</td>
<td>Upgrade from COAT 2.3 to COAT 2.4</td>
</tr>
</tbody>
</table>

**COAT Data Maintenance via MS EXCEL**:

<table>
<thead>
<tr>
<th>Version</th>
<th>COAT: Import of the attributes from EXCEL® to COAT 2.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1567990</td>
<td>COAT: Import of the attributes from EXCEL® to COAT 2.4</td>
</tr>
<tr>
<td>2235263</td>
<td></td>
</tr>
</tbody>
</table>

**Data Extraction:**

<table>
<thead>
<tr>
<th>Version</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>483425, 879680, 1015284, 1039600</td>
<td>DART and Material valuation</td>
</tr>
<tr>
<td>896894, 992803, 1012235, 1225592</td>
<td>Performance optimization:</td>
</tr>
<tr>
<td>2237433</td>
<td>FI open items</td>
</tr>
<tr>
<td>2059237</td>
<td>CO line items (primary/secondary)</td>
</tr>
<tr>
<td>1892650</td>
<td>Access to change documents</td>
</tr>
<tr>
<td>1355616</td>
<td>FTW1A: SD billing documents when using FI-CA</td>
</tr>
<tr>
<td></td>
<td>HCM – Transferring data to tax auditors – instructions</td>
</tr>
</tbody>
</table>
**View Creation:**
- 663077: SAP audit format
- 921487, 926048, 1045695, 1070572: View in AIS format cannot be read with IDEA®
- 945615: DART standard views
- 1045695: DART date conversion during view export
- 1056005: Authorization group for view files
- 1070572: IDEA® does not recognize view file as AIS format
- 1141016: Join condition always outer join

**International Context:**
- 450166, 546853: International requirements (Austria)
- 1082823, 1173730: International requirements (Portugal)

**Miscellaneous:**
- 1012531: GDPdU in SAP Business One

On SAP Service Marketplace (https://support.sap.com/notes), further information is available under the search terms of the following components:

- **DART:** CA-GTF-DRT
- **Authorizations for data access:** CA-GTF-GDP and
- **Authorizations for HCM data access:** PY-DE-NT-TX.
7.3  LINKS

(This list is not exhaustive.)

7.3.1  LINKS TO SAP PAGES

SAP SE
http://www.sap.de

SAP Service Marketplace
GDPdU information with additional notes

- https://service.sap.com
- https://service.sap.com/dart  Data Retention Tool
- https://service.sap.com/ais  Audit Information System
- https://service.sap.com/ilm  Information lifecycle management; SAP data archiving, among others

7.3.2  LINKS TO DSAG PAGES

GDPdU – Deutschsprachige SAP-Anwendergruppe e. V. (DSAG) (German-Speaking SAP User Group)
including the findings of a DSAG Work Group which deals with the effects of the act on
the SAP procedures.
http://www.dsag.de/

Direct access to pages of WG Data Access (GoBD/GDPdU):
https://www.dsag.de/arbeitsgremien/ag-datenzugriff-gobgdwpdu

Recommendations on applying the GDPdU (principles of data access and auditing of
digital documents)
Version 3.02, dated January 8, 2010
https://www.dsag.de/fileadmin/media/downloads/20100114_Handlungsempfeh-
lung_GDPdU_Update.pdf
Results of consultations with DSAG e.V. representatives and employees of SAP SE with SAP experts in financial Management on:
December 8, 2003 in Bonn
July 21, 2004 in Walldorf
October 25, 2005 in Mannheim
October 9, 2007 in Mannheim
April 28, 2009 in Mannheim
May 14, 2013 in Mannheim

Statement on BMF draft "Rules concerning the orderly management and storage of books, records, and documents in electronic form and data access (GoBD)", dated September 2, 2016

7.3.3 LINKS TO PAGES OF FISCAL AUTHORITIES AND ASSOCIATIONS

BMF: Rules concerning the orderly management and storage of books, records, and documents in electronic form and data access (GoBD)

BMF decree dated November 28, 2007, ref.:
Principles of data access and auditing of digital documents for purview of the customs authorities (GDPdUZ)
Ref.: III A 3 – S 1445/06/0029
http://www.elektronische-steuerpruefung.de/rechtsgrund/gdpduz.pdf

BMF: FAQ catalog
Respective current status, current status as of January 23, 2008

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Amendment of the BMF statement "Principles of data access and auditing of digital documents (GDPdU)", dated July 16, 2001 - IV D 2 - S 0316 - 136/01 - BStBl I p. 415;
TOP 17 of Audit I/12, BStBl. 2012 I page 930
BMF information on the description standard

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, AWV efficiency in the administration of economy and ...
http://www.awv-net.de, keyword: GoBD.

Information on customs audits

7.3.4 LINKS TO COMMERCIAL PROVIDERS

The following providers are commercial sites which provide content on GoBD / GDPdU. The content is subject to regular changes and cannot be verified by us. They are listed for the sake of completeness, but do not reflect the opinion of the DSAG or any of its Work Groups.

Collection of various information about the GDPdU
Extensive collection of sources and basis for further information for solutions and services related to electronic tax auditing in accordance with the GDPdU
http://www.elektronische-steuerpriufung.de

GoBD/GDPdU Portal | Home Page | The Portal for the Digital ...
... electronic tax auditing in accordance with the fiscal authorities' regulations on digital access to the tax-relevant data of companies (GDPdU). ...
http://www.gdpdu-portal.com

GoBD/GDPdU information from Audicon
http://www.audicon.net
http://www.gdpdu.com

GoBD information from Peters, Schönberger & Partner mbB
Rechtsanwälte, Wirtschaftsprüfer, Steuerberater
http://www.gobd.de
7.4 BMF STATEMENTS AND DECREES, OFD (REGIONAL TAX OFFICE) DECREES AND FISCAL COURT RESOLUTIONS

The following (non-exhaustive) overview contains judgments by courts on many aspects of data access.

To obtain detailed access to the listed links, you will need to register with the portal dejure.org. Depending on the extent of the information desired, access may be subject to a fee. Any additional references available on this subject can still be displayed if necessary.

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<th>Documentation of business transactions</th>
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<tr>
<td>Reference:</td>
<td>BFH IV 472/60</td>
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<tr>
<td>Guiding principle:</td>
<td>According to the generally accepted principles of accounting, retailers who generally sell goods to unknown customers over the counter for cash are usually not obliged to record the individual cash business receipts.</td>
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<tr>
<td>Judgment dated:</td>
<td>May 12, 1966</td>
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<tr>
<td>Link:</td>
<td><a href="https://dejure.org/1966,249">https://dejure.org/1966,249</a></td>
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<th>Subject:</th>
<th>Requirements for orderly accounting</th>
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<tr>
<td>Reference:</td>
<td>BFH IV 63/63</td>
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<tr>
<td>Guiding principle:</td>
<td>1. Orderly accounting requires that the merchant continuously, fully, and correctly record all business transactions as promptly as possible through basic records; it is not sufficient to account for credit purchases after four weeks as in the case of cash transactions.</td>
</tr>
<tr>
<td></td>
<td>2. Business transactions must be represented in accounting such that a financial statement can be created at any time without significant effort during the applicable retention period, even in the past.</td>
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<td></td>
<td>3. For credit transactions, it must be possible at all times to produce an overview of the status of receivables and liabilities.</td>
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<td>4. The scope of the requirements for orderly accounting, which the law stipulates as a basis for granting tax relief, generally does not depend on the type of tax relief at hand.</td>
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<td>Judgment dated:</td>
<td>March 26, 1968</td>
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<td>Link:</td>
<td><a href="https://dejure.org/1968,308">https://dejure.org/1968,308</a></td>
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<tr>
<td>Reference:</td>
<td>BFH I R 73/66</td>
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<tr>
<td>Guiding principle:</td>
<td>When recording each individual cash receipt and expenditure, the requirement of a business point-of-sale usually does not include the obligation to have current inventories of cash on hand or corresponding representation in ledgers or documents. This does not apply if daily cash receipts are determined via a cash register report (where permitted).</td>
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<tr>
<td>Link:</td>
<td><a href="https://dejure.org/1969,573">https://dejure.org/1969,573</a></td>
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<td>Link:</td>
<td><a href="https://dejure.org/2000,10560">https://dejure.org/2000,10560</a></td>
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<td>Reference:</td>
<td>Fiscal Court of Rhineland-Palatinate 4 K 2167/04</td>
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<td>Guiding principle:</td>
<td>For computerized accounting that is set up for periods starting from 2002, no objection can be made to an auditor's data access order without special reasons; here, any claim that paper documents are also available for auditing will be considered invalid. Taxpayers are responsible for organizing their computerized accounting such that an auditor's access will be restricted to the tax-relevant data at hand.</td>
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<tr>
<td>Link:</td>
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<tr>
<td>Reference:</td>
<td>Fiscal Court of Thuringia III 46/05 V</td>
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<tr>
<td>Guiding principle:</td>
<td>The legislature has defined tax secrecy in a way that provides for sufficient safety measures against improper use.</td>
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<td>Link:</td>
<td><a href="https://dejure.org/2005,12224">https://dejure.org/2005,12224</a></td>
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<td>Subject:</td>
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<tr>
<td>Reference:</td>
<td>Fiscal Court of Rhineland-Palatinate 1-K-1743/05</td>
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<td>Guiding principle:</td>
<td>The scope of data access in the context of tax audits was not extended by the provision of Section 147, para. 6 of AO, which entered into force on January 1, 2002.</td>
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<td>Judgment dated:</td>
<td>June 13, 2006</td>
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<td>Fiscal Court of Hamburg 2 K 198/05</td>
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<td>Guiding principle:</td>
<td>The right of the tax authority to use digitized data in accordance with Section 147, para. 6 of AO exists only in the scope of a recording obligation on the part of the taxpayer.</td>
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<td>Judgment dated:</td>
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<tr>
<td>Reference:</td>
<td>Fiscal Court of Saxony 4 V 1528/06</td>
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<td>Guiding principle:</td>
<td>The data stored in cash registers with respect to end-of-day total receipts involves posting documents created by means of a data processing system within the meaning of Section 147, para. 1, no. [MISSING] of AO. According to Section 147, para. 6, sentence 1 of AO, the tax authority always the right to inspect data processing systems which contain the aforementioned documents.</td>
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<td>Fiscal Court of Duesseldorf 16 V 3454/06</td>
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<td>Guiding principle:</td>
<td>For computerized accounting that is set up for periods starting from 2002, no objection can be made to an auditor's data access order without special reasons; here, any claim that paper documents are also available for auditing will be considered invalid.</td>
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<td>Judgment dated:</td>
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<td>Auditor requests documents of former clients from tax consultant.</td>
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<th>Submission of payroll archive CD</th>
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<tr>
<td>Guiding principle:</td>
<td>The documents subject to retention (according to Section 147, para. 1 of AO) which are of importance for taxation include payroll data. Such applicant data is stored in their installations of the data processing system DATEV, and can be provided from there on a data medium upon request. This data medium, which is referred to by the parties as a payroll archive CD, is suitable for use in IDEA (the auditing system used by external personal income tax auditors).</td>
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<tr>
<td>Link:</td>
<td><a href="https://dejure.org/2007,28388">https://dejure.org/2007,28388</a></td>
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<td>Guiding principle:</td>
<td>The incoming/outgoing invoices which were scanned for a given external audit (and originally created in paper form) must be made readable on-screen by the taxpayer. The taxpayer cannot fulfill this obligation by offering to print paper copies.</td>
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<td>Link:</td>
<td><a href="https://dejure.org/2007,458">https://dejure.org/2007,458</a></td>
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<td>Subject:</td>
<td>Tax relevance versus tax implications</td>
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<tr>
<td>Guiding principle:</td>
<td>Taxpayers are required to make incoming/outgoing invoices which were originally created in paper form and subsequently digitized through scanning readable on-screen on their computer systems for external auditors. They cannot avoid this obligation by offering to print paper copies. The data access of the fiscal authorities in accordance with Section 147, para. 6 of AO extends to financial accounting. Taxpayers are not entitled to block external auditors from specific individual accounts (here: provisions for expected losses, non-deductible business expenses, executive tax allocations) which, from the taxpayers' perspective, affect only commercial profits, not the basis for tax assessment.</td>
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<tr>
<td>Link:</td>
<td><a href="https://dejure.org/2007,458">https://dejure.org/2007,458</a></td>
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<th>Permissibility of an external audit in the case of professionals bound to confidentiality</th>
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<tr>
<td>Guiding principle:</td>
<td>Legality of the external audit order with respect to persons legally bound to confidentiality and authorized to refuse information; distinction between the legality of the external audit order and the question of the legality of individual measures in the course of the audit; impairment of the legality of the audit order by the subsequent form of the performance of the external audit; information obtained by the fiscal authorities during the course of the audit in relation to services provided to certain clients by the audited party as a potential means of deriving the illegality of the audit order; interest in bringing a legal action against the fiscal authority to refrain from the creation of client-related copies or tax disclosures before performing the external audit; discretionary decision of the fiscal authority on the creation of tax disclosures.</td>
</tr>
<tr>
<td>Link:</td>
<td><a href="https://dejure.org/2008,861">https://dejure.org/2008,861</a></td>
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</table>
### Subject: Income tax audit and financial accounting
Reference: Fiscal Court of Munster (legally binding) 6 K 879/07
Judgment dated: May 16, 2008
Guiding principle: The intervention in the taxpayer's business in the form of a request for a data medium which also contains financial accounting data is to be regarded as proportionate.
Link: https://dejure.org/2008,9877

### Subject: Reassessment in the event of accounting deficiencies
Reference: Fiscal Court of Cologne 6 K 3954/07
Judgment dated: January 27, 2009
Guiding principle: Accounting which is formally correct according to the law is presumed to be correct. A tax authority must first undermine this presumption before it may determine taxes based on an estimate. The Senate concluded that individual complaints to treasury management in the case to be decided were insignificant and thus saw no evidence of the incorrectness of the accounting based on the time-series comparison that was made.
Link: https://dejure.org/2009,1714

### Subject: Range of digital auditing for voluntarily created records
Reference: BFH VIII R 80/06
Judgment dated: June 24, 2009
Guiding principle: In a judgment dated June 24, 2009, the BFH made another fundamental decision on the data access of fiscal authorities and limited their access rights to voluntarily managed records. The fact that the BFH takes a different treatment as the basis for original digital documents than for their paper form will also have consequences for the practices of companies liable for accounting and will not only concern companies using the net income method.
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<td><strong>Reference:</strong></td>
<td>Fiscal Court of Cologne  13 V 1232/09</td>
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<tr>
<td><strong>Judgment dated:</strong></td>
<td>July 7, 2009</td>
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<tr>
<td><strong>Guiding principle:</strong></td>
<td>In principle, the Fiscal Court of Cologne considers it questionable that the timely auditing of large companies that was introduced in North Rhine-Westphalia, whereby only one tax assessment period is audited by the tax authorities, can be ordered within the authorities' discretionary powers against the will of a given company.</td>
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<td><strong>Link:</strong></td>
<td><a href="https://dejure.org/2009,1072">https://dejure.org/2009,1072</a></td>
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<td><strong>Reference:</strong></td>
<td>Fiscal Court of Nuremberg  6 K 1286/2008</td>
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<td><strong>Judgment dated:</strong></td>
<td>July 30, 2009</td>
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<tr>
<td><strong>Guiding principle:</strong></td>
<td>The tax authority may also request that tax consultants provide media containing tax-relevant data if they house sensitive client data. This was decided by the Fiscal Court of Nuremberg. The datasets are to be organized by the tax consultant in such a manner that no protected areas can be affected during a permitted inspection. The general view is that data access is not contrary to discretion because it is not possible to separate tax-relevant data from non-relevant data.</td>
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<td><strong>Link:</strong></td>
<td><a href="https://dejure.org/2009,7491">https://dejure.org/2009,7491</a></td>
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<td><strong>Reference:</strong></td>
<td>Fiscal Court of Lower Saxony  5 K 149/05</td>
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<td><strong>Judgment dated:</strong></td>
<td>October 20, 2009</td>
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<tr>
<td><strong>Guiding principle:</strong></td>
<td>According to the legal situation starting from January 1, 2009, the taxpayer is not entitled to exemption from the obligation to submit advance VAT returns in electronic form (para. 47)(para. 59). Neither the absence of the hardware or software required for electronic transmission nor the age of managing director A and B, nor their general security concerns about the submission of electronic tax declarations lead to a complete elimination of discretion that would allow the taxpayer to submit advance VAT returns in paper form.</td>
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<tr>
<td><strong>Link:</strong></td>
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<tr>
<td>Reference:</td>
<td>Fiscal Court of Hamburg BFH XI B 105/09</td>
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<tr>
<td>Guiding principle:</td>
<td>The obligation to submit electronic advance VAT returns can be inferred clearly from the law. Unspecified security concerns are no more of a justification for a case of hardship than the (reasonable) effort involved in using the ELSTER procedure.</td>
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<td>Judgment dated:</td>
<td>November 9, 2009</td>
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<td><a href="https://dejure.org/2009,32060">https://dejure.org/2009,32060</a></td>
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<td>Reference:</td>
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<tr>
<td>Guiding principle:</td>
<td>The obligation to submit electronic advance VAT returns can be inferred clearly from the law. Unspecified security concerns are no more of a justification for a case of hardship than the (reasonable) effort involved in using the ELSTER procedure.</td>
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<td>Fiscal Court of Munster 6 K 357/10</td>
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<tr>
<td>Guiding principle:</td>
<td>Right of fiscal authorities, in the context of external audits, to be granted read access to a document management system for the purpose of viewing digitized incoming invoices; incoming invoices and outgoing invoices as posting documents subject to the fiscal retention obligation.</td>
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<tr>
<td>Guiding principle:</td>
<td>... decided that taxpayers are required to make incoming and outgoing invoices which were originally created in paper form and were subsequently digitized by scanning readable on-screen via their computer systems for external auditing, and that they could not avoid this obligation by offering to print paper copies; furthermore, it was decided that the data access of fiscal authorities in accordance with Section 147, para. 6 of AO extends &quot;among other things, to financial accounting&quot;. The fact that this decision was taken in a procedure for interim relief does not, contrary to the applicant's claims, readily give rise to a need for further clarification within the meaning of Section 115, para. 2, no. 1 of FGO (code of procedure for fiscal courts) in relation to the legal issues decided there.</td>
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<tr>
<td>Link:</td>
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<td>Reference:</td>
<td>BFH I B 120/10</td>
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<td>Guiding principle:</td>
<td>It is not a matter of serious debate that a delay fee can also be imposed if a taxpayer does not fulfill a request from the fiscal authorities to issue information or to submit documents on time in the context of an external audit. There are, however, serious doubts as to whether the determination of multiple delay fees due to continuous non-submission of said documents is allowed.</td>
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<td>The decision on the determination of a delay fee in the form of the appeal ruling dated ... is – at most up to a month after notification of a decision in the main proceedings 8 K 1046/11 – suspended from execution.</td>
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<tr>
<td>Reference:</td>
<td>Fiscal Court of Rhineland-Palatinate 2 K 1277/10</td>
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<td>Guiding principle:</td>
<td>The Fiscal Court of Rhineland-Palatinate has ruled on the issue of whether abnormalities in the Chi-test warrant an accounting complaint and subsequent estimation of higher turnover/profits if no other shortcomings are found in the accounting at hand (Fiscal Court of Rhineland-Palatinate, judgment dated August 24, 2011 - 2 K 1277/10).</td>
</tr>
<tr>
<td>Link:</td>
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<tr>
<th>Subject:</th>
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<tr>
<td>Reference:</td>
<td>Fiscal Court of Muenster 13 K 3764/09</td>
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<tr>
<td>Guiding principle:</td>
<td>Accounting cannot be considered formally irregular simply because the accounting program used by the taxpayer (in this case, Sage-KHK Classic Line) cannot create CDs or IDEA-compatible data (only floppy disks) due to its age.</td>
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<tr>
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<tr>
<td>Reference:</td>
<td>BFH I R 15/12</td>
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<tr>
<td>Guiding principle:</td>
<td>The response to a collective request from tax investigators for data on the users of an Internet trading platform cannot be rejected because of the privately agreed confidentiality of this information.</td>
</tr>
<tr>
<td>Link:</td>
<td><a href="https://dejure.org/2013,15499">https://dejure.org/2013,15499</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subject:</th>
<th>Data access to identities of customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference:</td>
<td>Fiscal Court of Hesse 4 K 1120/12</td>
</tr>
<tr>
<td>Guiding principle:</td>
<td>Data access to the identities of customers during a capital gains tax audit of a credit institution</td>
</tr>
<tr>
<td>Link:</td>
<td><a href="https://dejure.org/2014,6677">https://dejure.org/2014,6677</a></td>
</tr>
<tr>
<td>Subject:</td>
<td>Profit estimations due to missing records; accounting obligation of driving instructors</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Reference:</td>
<td>Fiscal Court of Rhineland-Palatinate 5 k 1227/13</td>
</tr>
<tr>
<td>Judgment dated:</td>
<td>April 1, 2014</td>
</tr>
<tr>
<td>Guiding principle:</td>
<td>The tax authority may make a profit estimation if a driving instructor does not retain for the tax authority the records which he or she is obliged to retain according to the relevant legislation.</td>
</tr>
<tr>
<td>Link:</td>
<td><a href="https://dejure.org/2014,10627">https://dejure.org/2014,10627</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subject:</th>
<th>Audit: Limits on the retention of digitized tax data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference:</td>
<td>BFH VIII R 52/12</td>
</tr>
<tr>
<td>Judgment dated:</td>
<td>December 16, 2014</td>
</tr>
<tr>
<td>Guiding principle:</td>
<td>The decision is a data protection milestone with respect to the excessively extensive use of access rights by the fiscal authorities. It is based on the principle of proportionality and does not impede the investigative activities of the fiscal authorities with respect to fees. Not everything that is technically feasible and could be practicable is also legally permitted. This should also be taken into account in future work instructions for auditors.</td>
</tr>
<tr>
<td>Link:</td>
<td><a href="https://dejure.org/2014,55356">https://dejure.org/2014,55356</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subject:</th>
<th>Possibility of access to a pharmacy’s point-of-sale data in the context of an external audit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference:</td>
<td>Fiscal Court of Baden BFH X R 42/13</td>
</tr>
<tr>
<td>Judgment dated:</td>
<td>12/16/2014</td>
</tr>
</tbody>
</table>
| Guiding principle: | 1. The generally accepted accounting principles require retailers such as pharmacists to record, within reasonable limits, all individual business transactions, including cash revenues received at the point-of-sale.
2. If a retailer that generally sell goods of low value to unknown customers over the counter for cash uses a PC cash register that records detailed information about individual sales and enables permanent storage, the individual records thus produced are also reasonable.
3. In this case, the fiscal authorities are entitled to gain access to the individual point-of-sale data in the context of an external audit according to Section 147, para. 6 of AO. |
<p>| Link: | <a href="https://dejure.org/2014,51322">https://dejure.org/2014,51322</a> |</p>
<table>
<thead>
<tr>
<th>Subject:</th>
<th>Manufacturers of manipulable POS systems are personally liable for taxes evaded by their clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guiding principle: In summary proceedings, the Fiscal Court of Rhineland-Palatinate decided that the managing director of a company which manufactures and sells cash register systems (in addition to manipulation software) is liable for any taxes the company's customers have evaded.</td>
<td></td>
</tr>
<tr>
<td>Link: <a href="https://dejure.org/2015,87">https://dejure.org/2015,87</a></td>
<td></td>
</tr>
</tbody>
</table>

| Subject: BFH restricts time-series comparisons as an estimation method; requirements for estimations of time-series comparisons |
| --- | --- |
| Guiding principle: BFH largely regards time-series comparisons as an improper estimation method. In this ruling, it was decided that time-series comparisons in the context of audits may be used in principle as an analysis method. However, the requirements are so strictly defined that restaurants or other entities with strong seasonal business (for example) are likely to remain "spared" from time-series comparisons in the future. |
| Link: https://dejure.org/2015,18588 |

<p>| Subject: Request for information to third parties without previous clarification from the taxpayer – requests for information as a disputable administrative act – continuation of declaratory action |
| --- | --- |
| Guiding principle: The fiscal authorities may only contact persons other than the parties involved (also known as third parties) directly if, in the context of an anticipated assessment of evidence due to specifically verifiable facts, it is regarded as imperative that the clarification attempt by the parties will remain unsuccessful. |
| Link: <a href="https://dejure.org/2015,36828">https://dejure.org/2015,36828</a> |</p>
<table>
<thead>
<tr>
<th>Subject:</th>
<th>Digitizing documents (scanning)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guiding principle:</td>
<td>If decisive original documents of the taxpayer are deliberately destroyed after scanning during an ongoing procedure involving the fiscal authorities, the authorities can no longer base their claims on these decisive original documents if the taxpayer disputes their authenticity.</td>
</tr>
<tr>
<td>Link:</td>
<td><a href="https://dejure.org/2015,43457">https://dejure.org/2015,43457</a></td>
</tr>
</tbody>
</table>
### GLOSSARY

(This section is non-exhaustive.)

<table>
<thead>
<tr>
<th>Term</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABAP</td>
<td>Programming language for SAP R/3, SAP ERP 5.0/6.0</td>
</tr>
<tr>
<td>ACL®</td>
<td>Evaluation program; scope of functionality similar to the auditing software IDEA®; used, for example, by the fiscal authorities in Austria</td>
</tr>
<tr>
<td>ALV</td>
<td>Advanced List Viewer</td>
</tr>
<tr>
<td>AO</td>
<td>German Fiscal Code (Abgabenordnung)</td>
</tr>
<tr>
<td>APO</td>
<td>SAP Advanced Planning and Optimization</td>
</tr>
<tr>
<td>Archive systems</td>
<td>Data storage systems (not accounting systems), archives. If data in a source system can no longer be evaluated → tax relevance</td>
</tr>
<tr>
<td>ASCII</td>
<td>American Standard Code for Information Interchange, 7-bit character set with printable and non-printable characters</td>
</tr>
<tr>
<td>Asset history sheet</td>
<td>Development of fixed assets in the form of development for the fiscal year: financial position at the start of the year; changes due to acquisitions, retirements, etc.; financial position at the end of the year</td>
</tr>
<tr>
<td>ASUG</td>
<td>American SAP Users Group</td>
</tr>
<tr>
<td>AWV</td>
<td>Work Group for Economic Management (Arbeitsgemeinschaft für wirtschaftliche Verwaltung e. V.), Eschborn</td>
</tr>
<tr>
<td>BB</td>
<td>Specialist journal: Betriebsberater</td>
</tr>
<tr>
<td>BDI</td>
<td>Federation of German Industries (Bundesverband der Deutschen Industrie e. V.)</td>
</tr>
<tr>
<td>BDSG</td>
<td>German Federal Data Protection Act (Bundesdatenschutzgesetz)</td>
</tr>
<tr>
<td>BFH</td>
<td>The Munich-based German Federal Fiscal Court (Bundesfinanzhof) is the highest court for tax and customs matters, making it – in addition to the Federal Supreme Court, the Federal Administrative Court, the Federal Labor Court and the Federal Social Court – one of five supreme courts in the Federal Republic of Germany.</td>
</tr>
<tr>
<td>BGBl.</td>
<td>German Federal Law Gazette = Bundesgesetzblatt</td>
</tr>
<tr>
<td>Term</td>
<td>Meaning</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>BI</td>
<td>SAP Business Intelligence</td>
</tr>
<tr>
<td>BMF FAQ</td>
<td>Catalog of frequently asked questions issued by BMF at <a href="http://www.bundesfinanzministerium.de">www.bundesfinanzministerium.de</a> under the search term &quot;GDPdU&quot;</td>
</tr>
<tr>
<td>BMF</td>
<td>German Federal Finance Ministry (Bundesministerium der Finanzen)</td>
</tr>
<tr>
<td>BMJ</td>
<td>German Federal Ministry of Justice (Bundesministerium der Justiz)</td>
</tr>
<tr>
<td>BMWi</td>
<td>German Federal Ministry for Economic Affairs and Energy (Bundesministerium für Wirtschaft und Energie)</td>
</tr>
<tr>
<td>BO</td>
<td>SAP Business Objects</td>
</tr>
<tr>
<td>BSI</td>
<td>German Federal Office for Information Security (Bundesamt für Sicherheit in der Informationstechnik)</td>
</tr>
<tr>
<td>BStbK</td>
<td>German Federal Chamber of Tax Advisors (Bundessteuerberaterkammer)</td>
</tr>
<tr>
<td>BStBI</td>
<td>Federal Tax Gazette (Bundessteuerblatt)</td>
</tr>
<tr>
<td>BTCI</td>
<td>Batch input procedure, interface to import data into an SAP module</td>
</tr>
<tr>
<td>Business data warehouse</td>
<td>See Data Warehouse</td>
</tr>
<tr>
<td>Business letter</td>
<td>Includes all non-verbal external communications of a merchant regarding business matters</td>
</tr>
<tr>
<td>Byte</td>
<td>Unit of measure for data storage capacity</td>
</tr>
<tr>
<td>Megabyte</td>
<td>MB: 1,048,576 bytes</td>
</tr>
<tr>
<td>Gigabyte</td>
<td>GB: 1,024 megabytes</td>
</tr>
<tr>
<td>Terabyte</td>
<td>TB: one billion bytes, or 1,024 GB</td>
</tr>
<tr>
<td>BZSt</td>
<td>German Federal Central Tax Office (Bundeszentralamt für Steuern). Federal agency which is directly subordinate to the Federal Ministry of Finance.</td>
</tr>
<tr>
<td>Canned data</td>
<td>File which was created at a defined time and has not been processed/changed further</td>
</tr>
<tr>
<td>Cloud computing</td>
<td>Providing IT infrastructure (for example, computing capacity, data storage, network capacity, or finished software) for use via the Internet without (local) installation on the user's computer</td>
</tr>
<tr>
<td>CO</td>
<td>Controlling (SAP module)</td>
</tr>
<tr>
<td></td>
<td>Cost accounting by means of cost elements, cost centers, and orders as cost collectors; profit center accounting, among others</td>
</tr>
<tr>
<td>Term</td>
<td>Meaning</td>
</tr>
<tr>
<td>------------------</td>
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</tr>
<tr>
<td>COAT</td>
<td>Customer Object Administration Tool, an SAP application for classifying SAP objects</td>
</tr>
<tr>
<td>COM</td>
<td>Computer output on microfiche</td>
</tr>
<tr>
<td>Commercial letter</td>
<td>A document which relates to a commercial transaction</td>
</tr>
<tr>
<td>CRM</td>
<td>SAP Customer Relationship Management</td>
</tr>
<tr>
<td>CSV</td>
<td>Comma-separated values: Text file containing simply structured data with an arbitrary separator (for example, semicolons)</td>
</tr>
<tr>
<td>DART</td>
<td>Data Retention Tool, SAP SE solution for Z3 access</td>
</tr>
<tr>
<td>Data aggregation</td>
<td>Summary of individual data for a new date from which the individual data is no longer evident</td>
</tr>
<tr>
<td>Data compression</td>
<td>Aggregation of data without loss of data content to reduce file size</td>
</tr>
<tr>
<td>Data medium transfer (Z3)</td>
<td>Data is provided to the end user on a corresponding medium.</td>
</tr>
<tr>
<td>Data warehouse</td>
<td>Structured collection of business-related data for evaluation with special options</td>
</tr>
<tr>
<td>DB</td>
<td>Depends on context: &quot;database&quot; or the specialist journal: Der Betrieb</td>
</tr>
<tr>
<td>Digitally generated data</td>
<td>Results from an automatic process in an IT system; transferred automatically from one IT system to another IT system</td>
</tr>
<tr>
<td>Direct data access (Z1)</td>
<td>Direct access to data by the user through online entries</td>
</tr>
<tr>
<td>DMS</td>
<td>Document Management System</td>
</tr>
<tr>
<td>Document</td>
<td>Proof, basis for a posting in paper form. Can also involve electronically generated posting transactions, however (documents/line items).</td>
</tr>
<tr>
<td>Download/upload</td>
<td>Transferring data or programs from one system onto another medium or vice versa</td>
</tr>
<tr>
<td>DP</td>
<td>Data processing (synonym: EDP)</td>
</tr>
<tr>
<td>DSAG</td>
<td>Deutschsprachige SAP Anwendergruppe e. V. (German-Speaking SAP User Group), Walldorf, founded in 1995</td>
</tr>
<tr>
<td>DSB</td>
<td>Data Protection Officer (Datenschutzbeauftragter)</td>
</tr>
<tr>
<td>DStR</td>
<td>Specialist journal: Deutsches Steuerrecht</td>
</tr>
<tr>
<td>DStV</td>
<td>German Association of Tax Advisors (Deutscher Steuerberaterverband e. V.)</td>
</tr>
<tr>
<td>DTD</td>
<td>Data Type Definition</td>
</tr>
<tr>
<td>Term</td>
<td>Meaning</td>
</tr>
<tr>
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</tr>
<tr>
<td>EDI</td>
<td>Electronic Data Interchange, data interchange of structured data which allows automatic further processing by the recipient</td>
</tr>
<tr>
<td>EDP</td>
<td>Electronic data processing (synonym: DP)</td>
</tr>
<tr>
<td>ERP system</td>
<td>Enterprise resource planning: complex software for inventory management, production planning, production control, and financial accounting that is designed to plan business operations as efficiently as possible</td>
</tr>
<tr>
<td>EStG</td>
<td>German Income Tax Act (Einkommenssteuergesetz)</td>
</tr>
<tr>
<td>EStR</td>
<td>German income tax regulation (Einkommensteuerrichtlinien)</td>
</tr>
<tr>
<td>External audit</td>
<td>Summary term for income tax audits, special VAT audits, company audits (capital gains taxes) and customs audits</td>
</tr>
<tr>
<td>FAIT</td>
<td>Expert Committee of Information Technology of the Institute of Auditors in Germany (Fachausschuss für Informationstechnologie des IDW Institut der Wirtschaftsprüfer in Deutschland e. V.)</td>
</tr>
<tr>
<td>FAQ</td>
<td>A catalog of frequently asked questions</td>
</tr>
<tr>
<td>FeRD</td>
<td>Forum for Electronic Invoicing in Germany</td>
</tr>
<tr>
<td>FG</td>
<td>A fiscal court in Germany</td>
</tr>
<tr>
<td>FI</td>
<td>Finance (SAP module)</td>
</tr>
<tr>
<td></td>
<td>Handles financial accounting, including customer/vendor subledgers, asset management, and travel expense settlement</td>
</tr>
<tr>
<td>FI-AA</td>
<td>SAP module for asset accounting</td>
</tr>
<tr>
<td>FiBu</td>
<td>Financial accounting</td>
</tr>
<tr>
<td>Primary qualification right</td>
<td>Taxpayers decide on the assignment of their data and documents to the groups &quot;of importance for taxation&quot; or &quot;not of importance&quot; as the basis for the delimitation of access rights of external auditors.</td>
</tr>
<tr>
<td>Flat file</td>
<td>A one-dimensional (usually sequential) file</td>
</tr>
<tr>
<td>FN-IDW</td>
<td>IDW-Fachnachrichten (publication of the Institute of Auditors in Germany)</td>
</tr>
<tr>
<td>FTP</td>
<td>File Transfer Protocol</td>
</tr>
<tr>
<td>GDPdU</td>
<td>Principles of data access and auditing of digital documents: BMF statement dated July 16, 2001</td>
</tr>
<tr>
<td>GG</td>
<td>German Basic Law (Grundgesetz)</td>
</tr>
<tr>
<td>GmbHG</td>
<td>Act relating to limited liability companies</td>
</tr>
<tr>
<td>Term</td>
<td>Meaning</td>
</tr>
<tr>
<td>--------------</td>
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</tr>
<tr>
<td>GoB</td>
<td>Generally accepted Principles of Accounting (Grundsätze ordnungsgemäßer Buchführung)</td>
</tr>
<tr>
<td>GoBD</td>
<td>Rules concerning the orderly Management and Storage of Books, Records, and Documents in electronic form and Data access (Grundsätze zur ordnungsmäßigen Führung und Aufbewahrung von Büchern, Aufzeichnungen und Unterlagen in elektronischer Form sowie zum Datenzugriff)</td>
</tr>
<tr>
<td>GoBS</td>
<td>Generally accepted Principles of computer-assisted Accounting Systems (Grundsätze ordnungsgemäßer DV-gestützter Buchführungssysteme)</td>
</tr>
<tr>
<td>HCM</td>
<td>Human Capital Management (Human Resources); an SAP module called HR prior to its renaming</td>
</tr>
<tr>
<td>HOST</td>
<td>Mainframe computer</td>
</tr>
<tr>
<td>HR</td>
<td>Human Resources; new name: Human Capital Management (HCM)</td>
</tr>
<tr>
<td>IAS/IFRS</td>
<td>Formerly: International Accounting Standards, now: International Financial Reporting Standards, accounting principles according to the maxim &quot;true and fair&quot; (shareholder principle)</td>
</tr>
<tr>
<td>ICS</td>
<td>Internal control system. Collective term for any coordinated and interconnected control measures and regulations for asset protection, ensuring correct records, and implementing the objectives of a given business policy</td>
</tr>
<tr>
<td>IDEA®</td>
<td>Evaluation program employed by the fiscal authorities; manufacturer: CaseWare International Inc., Toronto, Canada, sales in Germany through Audicon GmbH, Düsseldorf/Stuttgart</td>
</tr>
<tr>
<td>IDoc</td>
<td>Abbreviation of &quot;intermediate document&quot;, a proprietary standard SAP format for exchanging data between systems/procedures</td>
</tr>
<tr>
<td>IDW</td>
<td>Institute of Auditors in Germany (Institut der Wirtschaftsprüfer in Deutschland e. V.)</td>
</tr>
<tr>
<td>IDW RS</td>
<td>IDW statements on financial reporting</td>
</tr>
<tr>
<td>Indirect data access (Z2)</td>
<td>Data is not evaluated by auditors themselves, but by one of the taxpayer’s employees in accordance with auditor specifications.</td>
</tr>
<tr>
<td>Inner join</td>
<td>A means of linking data tables. Produces only those data records that meet all the link conditions of the tables involved.</td>
</tr>
<tr>
<td>Term</td>
<td>Meaning</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Interface</td>
<td>A mechanism for transferring data between two systems</td>
</tr>
<tr>
<td>IT</td>
<td>Information technology; in many cases also used as a department name (synonym: data processing)</td>
</tr>
<tr>
<td>Links</td>
<td>Links between data fields from one or more tables via process structures or among data across multiple software applications</td>
</tr>
<tr>
<td>loc. cit.</td>
<td>Loco citato, meaning &quot;in the place cited&quot;</td>
</tr>
<tr>
<td>Migration</td>
<td>Transferring data from one system to a subsequent system. Transfer and implementation tools are usually provided by the software supplier in question. See also &quot;shutdown concept&quot;</td>
</tr>
<tr>
<td>MM</td>
<td>Materials Management (SAP module) Handles all materials management processes</td>
</tr>
<tr>
<td>MS ACCESS®</td>
<td>Database program from Microsoft Corp., Redmond, USA</td>
</tr>
<tr>
<td>MS EXCEL®</td>
<td>Spreadsheet program from Microsoft Corp., Redmond, USA</td>
</tr>
<tr>
<td>MS WORD®</td>
<td>Word processing program from Microsoft Corp., Redmond, USA</td>
</tr>
<tr>
<td>Outer join</td>
<td>A means of linking data tables. Produces only those data records that meet the join conditions of one of the tables involved.</td>
</tr>
<tr>
<td>P&amp;L</td>
<td>Profit and loss statement</td>
</tr>
<tr>
<td>PDF</td>
<td>Portable Document Format, a file format supplied by the software manufacturer Adobe Systems Inc., San Jose, USA; can be read by free and non-licensed programs, but can only be processed with full versions of Adobe software</td>
</tr>
<tr>
<td>PLM</td>
<td>SAP Product Lifecycle Management</td>
</tr>
<tr>
<td>Procedure/IT procedure</td>
<td>Summary of automated processing steps</td>
</tr>
<tr>
<td>Progressive auditing</td>
<td>Starts with the document, then proceeds via basic records to the accounts at hand before arriving at the balance sheet and profit-and-loss statement (or tax registration/tax return)</td>
</tr>
<tr>
<td>Query</td>
<td>Refers to database queries in related contexts</td>
</tr>
<tr>
<td>RE</td>
<td>Real Estate (classic SAP module)</td>
</tr>
<tr>
<td>Ref.</td>
<td>Reference</td>
</tr>
<tr>
<td>RE-FX</td>
<td>Real Estate (enhanced SAP module)</td>
</tr>
<tr>
<td>Relational database</td>
<td>Logical database; manages data in the form of linked tables for optimized access</td>
</tr>
<tr>
<td>Term</td>
<td>Meaning</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Remote inquiry</td>
<td>Data access to external systems at different locations</td>
</tr>
<tr>
<td>Reorganization</td>
<td>Reorganization by outsourcing data from a database to improve the performance of the database or system</td>
</tr>
<tr>
<td>Report</td>
<td>An analysis of data</td>
</tr>
<tr>
<td>RESISCAN</td>
<td>Project to describe the security-relevant technical and organizational measures which are to be considered during substitute scanning Publication: BSI TR-03138 Substitute Scanning (Ersetzendes Scannen) Link: <a href="https://www.bsi.bund.de/DE/Publikationen/TechnischeRichtlinien/tr03138/index_htm.html">https://www.bsi.bund.de/DE/Publikationen/TechnischeRichtlinien/tr03138/index_htm.html</a>.</td>
</tr>
<tr>
<td>Retrograde auditing</td>
<td>Progressive auditing in reverse (see above)</td>
</tr>
<tr>
<td>SAP</td>
<td>The software vendor SAP SE (Walldorf); supplies SAP ERP, SAP Business ByDesign, SAP Business One, and other products</td>
</tr>
<tr>
<td>SCM</td>
<td>SAP Supplier Relationship Management</td>
</tr>
<tr>
<td>SD</td>
<td>Sales and Distribution (SAP module)</td>
</tr>
<tr>
<td></td>
<td>Handles all matters in sales and distribution</td>
</tr>
<tr>
<td>SD</td>
<td>Sales and Distribution (SAP module)</td>
</tr>
<tr>
<td></td>
<td>Handles all matters in sales and distribution</td>
</tr>
<tr>
<td>Secondary qualification right</td>
<td>Based on the primary qualification right exercised by the taxpayer, the external auditor reviews the delimitation of the data access granted and makes a justified request for additional data access rights after classifying other data as tax-relevant.</td>
</tr>
<tr>
<td>SEM</td>
<td>SAP Strategic Enterprise Management</td>
</tr>
<tr>
<td>Shutdown concept</td>
<td>Definition of an approach to deactivating or shutting down IT systems</td>
</tr>
<tr>
<td>Spool file</td>
<td>A print list in file format; automatically generated for a print request.</td>
</tr>
<tr>
<td>Stand-alone (system)</td>
<td>An IT system without automatic interfaces to other processing systems</td>
</tr>
<tr>
<td>StBP</td>
<td>Specialist journal: <em>Die steuerliche Betriebsprüfung</em></td>
</tr>
<tr>
<td>Support package</td>
<td>Program package that enhances an existing program system; usually provided on a regular basis to address errors.</td>
</tr>
<tr>
<td>Task force</td>
<td>Rapid reaction force for special cases</td>
</tr>
<tr>
<td>tif / tiff</td>
<td>Tag Image File Format, a special format for image files</td>
</tr>
<tr>
<td>Transaction code</td>
<td>Code for calling a processing sequence (program, report, etc.) in an IT system, depending on user rights</td>
</tr>
<tr>
<td>Term</td>
<td>Meaning</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>USB</td>
<td>Universal Serial Bus, a serial bus system developed by INTEL/Microsoft to connect peripheral devices such as printers, burners, mice, digital cameras, and external data storage</td>
</tr>
<tr>
<td>UStID</td>
<td>VAT registration number (Umsatzsteueridentifikationsnummer)</td>
</tr>
<tr>
<td>VAT (USt)</td>
<td>value-added tax (Umsatzsteuer)</td>
</tr>
<tr>
<td>VATA (UStG)</td>
<td>Value-Added Tax Act (Umsatzsteuergesetz)</td>
</tr>
<tr>
<td>View</td>
<td>(Predefined) view of a database/table; in the context of the SAP tool DART, a file resulting from the evaluation of data extracts</td>
</tr>
<tr>
<td>WPg</td>
<td>Specialist journal Die Wirtschaftsprüfung, IDW Verlag GmbH, Düsseldorf</td>
</tr>
<tr>
<td>XBRL</td>
<td>Extended Business Relationship Language</td>
</tr>
<tr>
<td>XML</td>
<td>Extensible Markup Language: Description language in a simple, highly flexible text format that is largely device-agnostic</td>
</tr>
<tr>
<td>Z1: Direct data access</td>
<td>Type of access 1: Direct access to data by the user through online entries</td>
</tr>
<tr>
<td>Z2: Indirect data access</td>
<td>Type of access 2: Access to data by a representative of the end user</td>
</tr>
<tr>
<td>Z3: Data medium transfer</td>
<td>Type of access 3: Data is provided to the end user on a suitable medium</td>
</tr>
<tr>
<td>ZUGFeRD</td>
<td>Main user guide of the Forum for Electronic Invoicing in Germany; a specification for the eponymous format for electronic invoices</td>
</tr>
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