


TR 97/D4 - Income tax: electronic record keeping

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This document has been finalised by TR 97/21.



Draft Taxation Ruling

Income tax: electronic record keeping

other Rulings on this topic

IT 2349; TR 96/7; TR 96/11

contents	para
What this Ruling is about	1
Class of person/arrangement	1
Definitions	5
Ruling	6
Computerised record keeping systems	6
System controls	9
Storage of paper records in electronic form	12
System documentation	14
Access to computer records	16
Electronic data interchange	19
Date of effect	21
Explanations	22
Electronic records	22
Computerised record keeping systems	25
System controls	26
Storage of paper records in electronic form	29
System documentation	30
Electronic data interchange	32
Examples	36
Your comments	51
Appendix A	page 16

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DTRs may not be relied on by taxation officers, taxpayers and practitioners. It is only final Taxation Rulings which represent authoritative statements by the Australian Taxation Office of its stance on the particular matters covered in the Ruling.

What this Ruling is about

Class of person/arrangement

1. This Ruling explains to a person, including a company, carrying on a business, the principles associated with the retention of electronic records for the purposes of section 262A of the *Income Tax Assessment Act 1936* ('the Act'). Where that person uses a computer, either partly or fully, to run an accounting system, this Ruling sets out our views on what are sufficient electronic records which need to be retained to record and explain all transactions and other acts engaged in by such a person for the purposes of the Act.
2. Although section 262A applies for any purpose of the Act, this Ruling considers the section as it relates to the income and expenditure of a person carrying on a business.
3. This Ruling is the third in a series of Rulings released by the Australian Taxation Office ('the ATO') on record keeping. The first Ruling is Taxation Ruling TR 96/7 on the general principles of record keeping. The second in the series is Taxation Ruling TR 96/11 which sets out our views on what records are sufficient for the purposes of section 262A to record income from taxi takings. The ATO has also issued a publication called '*A Guide to Keeping Your Business Records*'. The Rulings and publication provide further information to a person carrying on a business on their record keeping responsibilities and should be read in conjunction with this Ruling.
4. This Ruling does not deal with the retention of electronic records created from business transactions carried out through the Internet or through the use of Smartcards.

TR 97/D4

Definitions

5. In this Ruling:

'documents and records' means	all documents and records including those documents and records kept in electronic form in a computer or in other electronic storage media;
'paper records' means	all written documentation, whether in hand writing or by typewriter, computer or other means of recording on paper;
'imaging' means	the scanning of an image into a digitised form to be stored electronically;
'electronically' means	held or processed by means of a computer;
'electronic storage medium' includes	hard disc, removable hard disc, diskette, floppy disc, CD-ROM, optical disc, magnetic tapes;
'EDI' means	Electronic Data Interchange.

Ruling

Computerised record keeping systems

6. When a person, carrying on a business, chooses to process and keep records in electronic form, the records must be in a form which ATO staff can access and understand in order to ascertain that person's taxation liability.

7. The information contained in a record, kept in a computerised accounting system, will be the same as would be contained in a manual accounting system.

8. We acknowledge that there are risks associated with the processing and retention of records on a computer system which are not generally associated with manual record keeping. Those risks include:

- the inadvertent destruction or corruption of electronic records;

- the unauthorised tampering with electronic records; and
- the possibility that electronic records and operating systems will become obsolete due to the constant upgrading or changing of computer systems over time.

System controls

9. We consider that a person carrying on a business with a computerised accounting system will have a series of adequate controls in place to safeguard the security and the integrity of the records processed and kept in that system. These can include:

- access controls;
- input and output controls;
- processing controls; and
- back-up controls.

10. The ATO considers that the level of controls required by a business is a matter for that particular business to determine if it can demonstrate that the records kept in the computer system are secure and accurate.

11. We have included as **Appendix A** of this Ruling a checklist of the electronic records which, providing adequate controls are in place, a person carrying on a business will need to keep to explain the essential features (i.e., the date, amount and character) of every transaction and enable the person's taxation liability to be ascertained. Depending on the nature and size of the business, not all of the records listed may be applicable.

Storage of paper records in electronic form

12. A business using either a manual or a computerised accounting system may want to store and keep paper records in electronic form. Where paper records are produced or received in the course of carrying on business, the ATO will accept the **imaging** of those records onto an electronic storage medium provided that the electronic copies are a true and clear reproduction of the original paper records.

13. Any original paper records produced or received and which are stored electronically must be:

- **read only** and must not in any way be altered or manipulated once inscribed;
- retained for the statutory period of five years;

TR 97/D4

- capable of being retrieved and read at all times by ATO staff. The taxpayer will be expected to provide appropriate facilities for the viewing of the electronic records kept in that format and where necessary, the printing of a paper copy or the provision of an electronic copy; and
- subject to adequate back-up control, i.e., a duplicate back-up copy of the stored records must be kept at all times at a safe location.

The records may include:

- invoices, purchase orders, receipts, vouchers, credit notes, delivery dockets, etc.;
- bank statements and other bank records and documents; and
- any other paper source documents produced or received in the course of carrying on a business.

System documentation

14. To ensure that the records are being maintained in accordance with subsections 262A(1), (3) and (4), a person should have an understanding of their computer system. System documents should be retained to explain the basic aspects of that system so ATO officers can ascertain that the system is doing what it is claimed to do.

15. Where systems (regardless of their level of sophistication) have changed over time, records are to be kept to allow the original data to be reconstructed to satisfy section 262A. The records to be kept include:

- a chronological record and explanation of all changes or upgrades to the software and hardware employed in the system, including explanations of how the new system can recreate an original record;
- a detailed, documented record of the controls which maintain the integrity of the old system and of the records processed and transmitted;
- explanations of archival and back-up facilities under that system.

Any data held under an old system is to be capable of conversion to a form which is readily readable and retrievable by the ATO. Thus, the ATO would prefer that data be converted to a standard data format, e.g., ASCII, DBF or a spreadsheet format.

Access to computer records

16. Under section 263 of the Act, the Commissioner or any duly authorised officer has the right of full and free access to all buildings, places and documents, including electronically stored records required for the purposes of the Act. The provision enables an authorised officer to access and copy records held on an electronic storage medium.

17. In addition, subsection 263(3) requires the occupier of a building or place to provide an authorised officer with all reasonable facilities and assistance for the effective exercise of powers under the section. In the context of electronically stored records, reasonable facilities and assistance extend to the provision of login codes, keys, passwords, etc., and access to hard copies of the records as well as allowing the authorised officer to read computer and software manuals.

18. Where it is necessary to download electronic records onto ATO computers, it is the policy of the ATO to invite taxpayers to carry out the copying of these electronic records for and on behalf of the ATO on tapes or disks provided by the ATO. Where this is inconvenient or impractical, the ATO undertakes, with the approval of the taxpayers, to carry out that downloading process.

Electronic data interchange

19. Many businesses transfer data and information electronically to both internal and external sources. This process is commonly referred to as Electronic Data Interchange ('EDI'). A special feature of EDI is that most of the transfers are done automatically between respective computers.

20. Where a person carrying on a business uses EDI, we consider section 262A requires the person to keep records which explain all EDI transactions that are relevant for any purpose of the Act. The record keeping requirements for EDI are the same as for other computer records as set out in the preceding paragraphs of this Ruling.

Date of effect

21. This Ruling applies to years commencing both before and after its date of issue.

Explanations

Electronic records

22. Records made by and stored in a computer are recognised as documents for the purposes of Commonwealth legislation. Section 25 of the *Acts Interpretation Act 1901* extends the ordinary meaning of the word **record** to include information stored by means of a computer. The reference in subsection 262A(1) of the Act to the keeping of records therefore includes a reference to information stored or recorded by means of a computer. A person carrying on a business must keep documents and records made by and/or stored in a computer system. By virtue of subsection 262A(3), the person is required to keep these computer records in the English language or in a form readily convertible into English.

The explanatory memorandum to the Taxation Laws Amendment Bill (No 5) 1989 which introduced subsection 262A(3) into the Act explained:

'Subsection 262A(3) obliges a person who is required by the section to keep records, to keep those records:

- by paragraph (a) - in the English language or, if not in written form (e.g., in an electronic medium such as magnetic tape or computer disc), in a form which is readily accessible and convertible into writing in English; ...'

23. In addition, the admissibility of computer produced evidence in Federal Courts is now governed by various provisions in the *Commonwealth Evidence Act 1995* ('the Evidence Act'). Broadly speaking, computer documents are admissible evidence in taxation matters subject to relevance and, where necessary, proof as to the competence of the computer device. Even prior to the introduction of the Evidence Act, documents held in electronic form had been accepted as admissible evidence: *DFC of T v. Capron* 93 ATC 4144; (1993) 25 ATR 142.

24. The ATO has for some time recognised that advances in technology have meant that many taxpayers now process and keep their accounting records electronically. We acknowledge that there are many advantages associated with such an approach.

Computerised record keeping systems

25. There are many similarities between a manual accounting system and one run by a computer. Essentially, both systems involve the updating of a general ledger and subsidiary ledgers. Many businesses

nowadays use computerised accounting packages to process their financial transactions and to prepare their periodical accounts. Different businesses have different needs in terms of the type and level of complexity of the computerised accounting system they wish to operate. Some small businesses find it adequate to operate from a basic accounting system, e.g., from a computerised cash flow system where the computer acts merely as an accumulator and produces various reports at regular intervals. Other businesses need to operate from highly sophisticated and fully integrated real time systems where one single transaction or entry in the system triggers the processing and recording of many other transactions, e.g., where a sale transaction will simultaneously update various ledger accounts, adjust stock levels, etc. We consider that computerised accounting systems operate essentially in the same manner as manual accounting systems and the records kept in them are, in principle, the same as those kept under manual accounting systems.

System controls

26. Significant concerns which the ATO has about the retention of electronic records are the risk of loss of integrity or corruption of those records and the inability over time of taxpayers to reconstruct records which have been inadvertently destroyed, manipulated or tampered with, or altered or lost within a computerised accounting system. It is normal practice for a person operating such a system in a business to safeguard the security and integrity of the records kept in that system through the use of system controls. Those commonly expected to be in place include:

- access controls, i.e., the controls over access to a computer system by some form of identity recognition, such as a password, card system, personal identification number ('PIN') or some combination of these;
- input and output controls, i.e., the controls which ensure the accuracy and security of the information received and transmitted;
- processing controls, i.e., the controls which protect and ensure the integrity of the information processed by the system; and
- back-up controls, i.e., the controls which guarantee the retention of back-up copies of computer files, computer programs and the recovery of computer records in case of system failure.

27. The size of the business will often dictate the level of sophistication of the computerised accounting system which that

business will adopt. This, in turn, will impact on the level of complexity of the system controls in place. The ATO takes the view that the levels of controls required by a business is a matter entirely for that business to determine after assessing its own requirements, provided that the records kept in the computer system are secure and accurate.

28. We stated in Taxation Ruling TR 96/7 that, in circumstances where records of individual transactions provide no additional information about the essential features of the transactions, a person can record and explain those transactions by recording and explaining groups of transactions, i.e., in the form of summary records. The same conclusion applies to records held electronically. For example, in TR 96/7, we advised that rolls of cash register tapes may be discarded after one month, provided that there had been a reconciliation of the Z-totals with actual cash and bankings for that period. In this case, an electronic reconciliation, as described above, would be acceptable to the ATO.

Storage of paper records in electronic form

29. In Taxation Ruling IT 2349, we stated that where it was intended to convert original records to microfilm or computer output microfiche, the conversion had to be carried out in such a manner that the film/fiche would represent a true and clear reproduction of the original documentation. The ATO acknowledges that microfilm/microfiche technology, although not entirely obsolete, is not commonly utilised these days and that the conversion of paper records onto an electronic storage medium, by way of an **imaging** process, has effectively replaced that technology. The ATO therefore accepts the imaging of paper records provided the conversion process produces electronic copies which are a complete, true and clear reproduction of the original paper records. For instance, Optical Character Recognition conversion processes which do not produce a 100% accurate reproduction of original documents are not acceptable to the ATO.

System documentation

30. Where a person keeps records within a computerised accounting system, certain system documents are to be retained to **explain** the basic aspects of that system so that ATO officers can ascertain that the system is doing what it is claimed to do. In the case of a simple accounting software package, these documents may be limited to a system manual which explains:

- the operation of the various components of the system;

- the controls built in the system; and
- the flow of data from input to output.

31. With a sophisticated computerised accounting system, the documents need to include:

- details of the file organisation and controls;
- details of record contents and format;
- the program logic, in the case of in-house produced computer programs; and
- audit trails or logs of records added, deleted and amended which relate to the accounting system.

Electronic data interchange

32. EDI is widely understood to mean the transfer of data, by agreed message standards, electronically from computer to computer. The exchange of information can be by way of document transfer only (i.e., where a document is merely sent electronically to a receiver, not unlike an invoice sent by mail) or by interactive mode (i.e., where the document results from an actual exchange of information, not unlike an interaction by telephone).

33. The ATO considers that there should be no difference in the general principles governing the records processed and kept in an EDI environment and in a normal computerised accounting system. Taxpayers who operate in an EDI environment ordinarily have in place, for their own purposes, adequate controls to safeguard the security and integrity of their transactions. Those controls have been discussed earlier.

34. Users of EDI should ensure that controls are in place to prevent unauthorised access to their EDI network by the use of access passwords, or some other form of authentication (e.g., electronic signatures), together with a secure user profile which would define the identities of the trading partners, the transaction types which can be exchanged, the standards and versions used and the direction of the exchange. This profile would ordinarily be encrypted and, in turn, secured against unlawful access by the use of user passwords, PIN numbers or access keys. In addition, EDI messages should be protected against unauthorised reading by the use of encryption techniques applied to all or part of the messages. Providing that these controls are in place, we consider that the retention requirements as stated previously in this Ruling apply equally in an EDI environment.

35. A copy of all original transmitted and received messages in their own interchanged image (e.g., EDIFACT or ANSI X12 image) are

TR 97/D4

required, as well as audit trails, and logs of all EDI transactions are to be retained. The audit trails will allow a transaction to be traced through a system forward to its ultimate destination and backward to its beginning through relevant source transactions. Where messages have been encrypted, those encryptions must be capable of being removed to allow for authorised officers to understand the contents of the message.

Examples

Example 1

The facts

36. Joe's Corner Mini Mart is a small family business with an annual turnover of about \$300,000. Its sales are strictly on a cash basis and are recorded through a cash register. It purchases its supplies either by cash or on 30 day terms. The business pays its expense accounts either by cash from the till (for small expenses) or through a business cheque account for items of stock and other expenses. It employs one casual employee for after school and week end hours. The employee has access to the cash register but not to the computer system which only Joe operates.

The system

37. Joe has adopted an electronic cashbook system because of the nature and size of his business. Although he is the only one who operates the system, he has built into the system a password control to stop unauthorised access to his accounts. The system provides him with up to date information on what payments he has made (by cash or cheque) for stock or running expenses; daily total receipts which he has banked and reconciled with his cash register tapes; a bank reconciliation showing deposits made and any withdrawals; periodical trial balances; income and expense reports; and even a balance sheet.

38. Joe can download these reports on a computer disk or print out a copy for his accountant or bank manager at any time. On advice from his software provider, at the end of every month Joe backs up all his accounts onto a floppy disk, which he keeps at home in case the computer system crashes. He has been provided with a system manual by his computer company and a short hands-on training session on the operation of the system. He keeps invoices sent to him by suppliers and bank statements of his business account in paper form in a filing cabinet. He also keeps a purchase order book to order stock.

Our view

39. We consider that Joe has appropriate system controls including file back-up facilities to ensure the security and integrity of the electronic records kept in the system. He also has a system manual which will explain to an ATO officer what the system does and how input data is processed by the system in producing the various records and reports.

40. The electronic records kept in the electronic cash book can be audit trailed to original transactions, groups of transactions or summaries of transactions. For instance, the receipts entry in his cashbook for sales made on one particular day can be traced back to a reconciled Z-total on a cash register tape and can be cross referenced to a reconciled banking deposit entry. The reconciled entry also shows any personal drawings, any cash payments for expenses or stock, etc., for that day.

41. Joe has integrated in the accounting system the use of a simple but convenient computer package which enables him to have better control over his accounts, to know at any point in time his liquidity position and to have a better financial picture of his business.

Example 2***The facts***

42. ABC Pty Ltd conducts a medium size business as an importing wholesaler/retailer of variety goods. It has an annual turnover of about \$1-2 million and sells by wholesale generally on 30 day accounts to country and interstate distributors from its outer city warehouse and through its own two suburban retail outlets. These shops sell by cash or credit cards and all sales are put through its cash registers. The cash registers have provision for different categories of goods sold, e.g., toys, stationery, hardware.

43. Each store has three full time staff and a number of casuals who mostly work on weekends. Although ABC purchases the majority of its goods directly from overseas suppliers, on some occasions it purchases locally, mainly when faced with stock shortages on popular items. The business carries a large stock of many small and low cost items. Its warehouse employs three storemen/deliverers and one office administrator. Frank, the company's principal, concentrates on sales, marketing and dealing with the overseas suppliers.

TR 97/D4

The system

44. ABC has recently installed a computerised accounting system which it feels will provide it with a faster and more efficient accounting system and suit its needs, given the rapid growth in business it is experiencing. Its main focus has been to improve the invoicing of the country and interstate distributors and to ensure that it promptly receives and follows up payments on these invoices. The ABC computerised system provides the following facilities:

- automatic invoicing and a credit sales module which integrates with the inventory component of the system;
- end of month statements which are sent on outstanding accounts;
- complete cashbook facilities (including bank reconciliations) which are updated at the end of each day after the takings from the retail stores have been reconciled and a general ledger which is fully integrated with all subsidiary ledgers. At the end of each day, a transaction log is produced by the system which reports on all the day's transactions;
- a system manual as well as on screen help functions; the manual describes the system; its various components; the documentation which it can produce; the controls; and the safeguards; and
- access via a two level password - at the first level, by the office administrator who enters information for the production of invoices, entries in the cash book, payment of accounts etc; at the higher level, by Frank who is the only one able to access certain reports such as the balance sheet, and view and print the general ledger accounts.

The office administrator backs up all accounting records every Wednesday and at the end of every quarter, all accounting records are downloaded onto a floppy disk and sent to the company's accountant. With the increase in trade, ABC is considering employing two or three more staff and adding a payroll software package to its system.

Our view

45. ABC's system has in place appropriate system controls which ensure the security and integrity of the electronic records kept therein. The two level password ensures that access is restricted and traceable to particular individuals. The system can be 'explained' by virtue of the manual or on screen help functions supplied by the software manufacturer.

46. Appropriate audit trails exist for all transactions through the transaction logs and these can be reconciled and cross referenced with other electronic records held under the system. For instance, a sale of 100 widgets to XYZ (a country account distributor) will automatically update XYZ's debtor's account, the debtors' ledger and the stock level for widgets and at the end of the day's trading, a transaction log will report on each transaction which was processed and acts as the audit trail. Details explaining the essential features of all transactions are available as are electronic records of all financial reports.

Example 3

The facts

47. The TC Hotel is an inner suburban pub owned by a husband and wife with an extensive bar trade, restaurant and bistro facilities, a drive through service, poker machines, TAB racing facilities and 30 motel-type accommodation rooms. Its annual turnover currently stands at \$7-8 million. Most of its revenue is derived in cash or through credit cards although recently it has started catering through its restaurant and bistro for local businesses where payment is made by cheque on 30-day account.

48. The hotel has also recently introduced EFTPOS facilities in its restaurant, drive through bottle shop and gaming areas. A barcode scanner is also in operation in the drive through as this seems to speed up customer service. All of its cash registers are linked to a central computer facility located in the administration area and every transaction is recorded on a real time basis, updating relevant ledgers immediately the transaction occurs. The business purchases all of its supplies on credit and takes full advantage of either the 30- or 60-day terms offered. The hotel employs as many as 30 employees, who are either permanent full timers or work only on a casual basis.

The system

49. The business's computer system is fully integrated and revolves around a general ledger. It has the following features:

- it operates on an open item basis, i.e., each transaction is processed immediately it occurs and triggers the updating of relevant ledgers. For instance, the scanning of a carton of beer in the drive through department triggers a series of simultaneous transactions. Once the sale is completed either by cash, credit card or through EFTPOS, the inventory records are also immediately updated giving an

TR 97/D4

up to the minute view of the stock level of that particular item;

- each product's sales can also be called up on screen for viewing, comparison with past months' sales, etc.;
- reorder points are automatically set in the computer;
- other reports are produced on all aspects of the business' trading activities including full current bank reconciliation, trial balance at any time, all transaction history and full audit trail;
- the system operates as a network allowing for a number of users to access it at various locations within the hotel at any time. A multi-level password system is employed with some staff only permitted to operate certain functions of the system;
- system support is provided by an elaborate manual, on-screen help functions, demonstration disks and technical support from the software provider; and
- backing up of the computer files is carried out at the end of each day and the business records are downloaded to floppy disks periodically for the business' external accountants.

Our view

50. This business's system, although more sophisticated than those in the earlier examples, is nevertheless subject to tight controls and security safeguards. Access controls are available, as are appropriate audit trails to all transactions which enable the tracing back of any transaction through the system to its origin. The business also has in place a system for 'backing up' its electronic records. Explanations of the system are provided by the manual and other facilities, as well as system support from the software manufacturer. The essential features of each transaction (or batch of transactions) can be explained by the taxpayer on request.

Your comments

51. If you wish to comment on this draft Ruling please send your comments by: 18 July 1997

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- business records
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- ITAA 262A
- ITAA 262A(1)
- ITAA 262A(3)
- ITAA 262A(4)
- ITAA 263
- ITAA 263(3)
- AIA 25

case references

- DFC of T v. Capron 93 ATC 4144;
(1993) 25 ATR 142

APPENDIX A

CHECKLIST OF ELECTRONIC RECORDS

(The following checklist represents only a guide and should not be taken as an exhaustive list of all records required to explain transactions.)

a) Electronic records (or summary records) of sales transactions such as:

- cash sales, including reconciliations made of cash register tapes;
- credit sales, including electronic copies of merchant statements for sales made by you or alternatively, electronic copies of summary statements of reconciled credit transactions;
- invoices and statements issued, including invoices and statements which you have sent electronically (e.g., via EDI) or imaged copies of hard copy invoices and statements which you have sent;
- credit notes issued for returned goods;
- updates and adjustments to the debtors' ledger; and
- where appropriate, stock used for private purposes.

b) Electronic records (or summary records) of purchase transactions including:

- cash and credit purchases, including credit card purchases;
- purchase orders issued;
- invoices and statements received from suppliers; these would include invoices and statements which suppliers have sent electronically (e.g., via EDI) to you or imaged copies of hard copy invoices and statements sent to you;
- payment details;
- updates and adjustments to the creditors' ledger; and
- inventory details, including stocktake lists, price lists details, etc.

c) Electronic records (or summary records) of all other items of income and expenditure such as:

- business expenses like rent, electricity, telephone, insurance, etc.;
 - motor vehicle expenses, including records of information kept in car log books and details of odometer readings.
- d) Electronic records of quotes provided.
- e) Electronic records of information obtained from job sheets.
- f) Electronic records (or summary records) of banking transactions including:
- details of deposits;
 - details of withdrawals or payments;
 - bank statements;
 - bank reconciliations; and
 - details of any term deposits and any other investments associated with the business.
- g) Electronic records of the purchase and disposal of assets; depreciation schedules; etc.
- h) Electronic records of all entries to the general ledger and a reconciliation of that ledger to all other subsidiary ledgers.
- i) Electronic records of:
- profit and loss statement;
 - balance sheet;
 - other financial statements;
 - schedule of work in progress and raw materials, where applicable, at the end of the financial year; and
 - all wages transactions.
- j) Audit trails or logs of all electronic transactions including deletions, additions and changes to accounting data.