



*For Departmental circulation only*

# Computer Assisted Audit Program Manual

2009



Central Board of Excise and Customs  
Ministry of Finance  
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# Contents

<i>Preface</i>	vi
<i>List of Abbreviations</i>	vii
<b>Chapter 1: Introduction</b>	I.1
1.1 Ownership	I.2
1.2 Amendments	I.2
<b>Chapter 2: Role and Mandate of the Program</b>	II.1
2.1 Role	II.1
2.2 Mandate	II.1
2.3 Program Objectives	II.1
<b>Chapter 3: Legislative Framework</b>	III.1
<b>Chapter 4: Program Management Framework</b>	IV.1
4.1 Workload Review	IV.1
4.1.1 Survey	IV.1
4.1.2 Selection of Units	IV.1
4.1.3 Annual Plan	IV.1
4.2 Infrastructure Review	IV.1
<b>Chapter 5: Steps in a Computer Assisted Audit</b>	V.1
5.1 Desk Review	V.1
5.2 Letter to the Assessee	V.2
5.3 Assessee System Description	V.2
5.4 Assessee Accounting System Review	V.2
5.4.1 Gathering & documenting accounting systems information	V.2
Review the Accounting System	V.2
Business System Structure	V.3
Major Accounting Modules	V.3

Minor Accounting Modules	V.3
Non-Accounting Systems	V.4
5.4.2 Data Flow Diagrams / System Flow Charts	V.5
5.4.3 Analysis of Chart of Accounts	V.5
5.4.4 Analysis of Reports Generated	V.6
5.4.5 Analysis of Record/File Layouts	V.6
5.5 Computer Assisted Audit Feasibility Evaluation	V.7
<i>Box 5.1:</i> Parameters for carrying out CAAFE	V.8
5.5.1 Period of Computerization	V.8
5.5.2 Nature of the Computer System	V.8
5.5.3 Extent of Computerization & Level of Integration	V.8
5.5.4 State of Documentation	V.9
System Design Documents	V.9
Data Flow Diagram	V.9
Chart of Accounts	V.9
Special Coding Chart	V.10
Data Dictionaries / Record Layouts	V.10
Backup/Retention Policy	V.10
Archiving Methods	V.10
Restoration process	V.11
Listing of various reports generated by the system	V.11
5.5.5 Data Transfer Mechanism	V.11
Test Data Transfer	V.11
Create a Test File	V.11
Selection of Data Format	V.11
Test Transfer Mechanism	V.12
Verify the Test File	V.13
5.6 Go / No-Go Decision	V.13
5.7 CAAP Objectives as per EA-2000 Audit Plan	V.14
5.8 Data Transfer and Review	V.14
<i>Box 5.2:</i> Confidentiality of Assessee Information	V.14
5.8.1 Verify File Layout	V.15
5.8.2 Verify File Integrity	V.16
5.8.3 Trial Balance	V.16
5.8.4 Balancing Number of Transactions	V.17
5.8.5 Balance Key (Amount) Fields	V.17
5.9 Data Preparation	V.18

5.9.1	Identify records / fields needed	V.18
	Fields	V.19
5.9.2	Determining if modifications required	V.19
5.9.3	Modifying the format of files	V.20
5.9.4	Determining if links for joining files are required	V.20
5.10	CAAT	V.21
5.10.1	Perform CAATs	V.21
5.11	CAAP Audit Report	V.22
5.12	Backing up Data and Return of Original Media to Assessee	V.23
5.12.1	Hardware Options for back-up of CAAP work	V.23
5.12.2	Software Options	V.23
5.12.3	Backup Frequency	V.24
5.12.4	What to Backup	V.24
5.12.5	Retention Period	V.24
5.12.6	Return of Assessee Media	V.25
5.12.7	Future Recommendations to the Assessee	V.25
<b>Chapter 6 : Security</b>		VI.1
<i>Annexe A:</i>	Legislative Provisions related to CAAP	A.1
<i>Annexe B:</i>	Outlining the Computer Assisted Audit Program (CAAP): Auditing in an Electronic Environment	B.1
<i>Annexe C:</i>	Survey of Computer Systems and Accounting Systems Used by the Assessee	C.1
	Help File (For completing the survey)	C.4
<i>Annexe D:</i>	Sample Letter to the Assessee and Request to Fill Out the CAAP Survey	D.1
<i>Annexe E:</i>	CAA Assistance Form	E.1
<i>Annexe F:</i>	Samples of Data Flow Diagrams / System Flow Charts	F.1
<i>Annexe G:</i>	Assessee Accounting Systems Review	G.1
<i>Annexe H:</i>	Computer Assisted Audit Feasibility Evaluation Checklist	H.1
<i>Annexe I:</i>	Computer Assisted Audit Objectives	I.1
<i>Annexe J:</i>	Official Receipt for Electronic Records Received from the Assessee	J.1
<i>Annexe K:</i>	CAA Report	K.1
<i>Annexe L:</i>	Samples of Record/File Layouts	L.1

# Preface

1. Central Board of Excise and Customs has taken several initiatives in the past to introduce 'e'-governance in the department. Computer Assisted Audit Program (CAAP) in Central Excise and Service Tax administration is another initiative which aims to secure better legal compliance on one hand and minimum interface with trade on the other. The program enables audit officers to use the speed, efficiency, and accuracy of IT hardware and software to deliver audit functions more effectively and comprehensively after importing relevant electronic business data from the assessee's information system.
2. Computer Assisted Audit Program functions within the overall framework of EA-2000. It is an electronic tool meant to carry out audit verifications of assessee's electronic business records more comprehensively to meet the objectives of EA-2000 which may, otherwise, be difficult to achieve manually in large scale or even mid-size units. Such computer aided audit verification is necessary in the present era where administrative controls are relaxed and very high reliance is placed on the trade.
3. To enable the auditors to understand importance of computer assisted audit and to develop a uniform computer assisted audit approach in all the commissionerates in the country, the Directorate General of Audit has prepared this CAAP Manual with the support of consultants from Asian Development Bank and our own officers who have experience in CAAP audits. The manual enables officers to gain a fair idea of the legislative framework that empowers them to conduct such audit in a trade-friendly manner. It teaches them the skills necessary to win the confidence of the assessee, understand their electronic business systems and then to import the relevant part of the information into their own media for analysis to check legal compliance. The manual has various Annexes that standardize various processes and make the task easier for auditors and senior managers.
4. CAAP has already been launched in over forty commissionerates in the country and all commissionerates would be covered within the year 2009. It is hoped that auditors will find the Manual useful and will forward their suggestions to the Directorate for making it more meaningful.

This manual has been prepared as part of the Asian Development Bank's Technical Assistance Project (IND: TA 4263) titled 'Capacity Building for Tax Administration'.

# Abbreviations

LAN	Local Area Network
CAAP	Computer Assisted Audit Program
EA-2000	Excise Audit 2000
CAA	Computer Assisted Audit
CAAFE	Computer Assisted Audit Feasibility Evaluation
CSV	Comma Separated Value
ASCII	American Standard Code for Information Interchange - used to represent text and numbers in most personal computers
DBF	filename extension for a file format developed by dBASE Inc - now an alternate name for Comma Separate Value
EBCDIC	Extended Binary Coded Decimal Interchange Code - an alternate to ASCII and was developed by IBM
CAAT	Computer Assisted Audit Techniques
Flat File	a plain text file which usually contains one record per line



# Chapter 1: Introduction

1A Tax accounting systems of all large and medium assesseees are now computerized. The introduction of microcomputers and powerful personal computers (both stand-alone and LAN configured) has caused the proliferation of computerized accounting systems. As a result, many small assesseees are also maintaining electronic records. Modern accounting systems are being rendered progressively paperless. Increasingly therefore, auditors need to acquire the relevant technological literacy to do their jobs.

1B The Computer Assisted Audit Program (CAAP) has been designed to serve precisely this purpose. It aims to facilitate computerized Excise/Service Tax audit of private (business) electronic accounting and transaction records of assesseees or registrants. CAAP auditors can use the speed and computing power of computers and special auditing software, such as IDEA, to extract and interpret large volumes data, thereby improving the effectiveness and efficiency of audits. CAAP is capable of determining and recording the assesseee's liabilities under the various levies administered by Central Board of Excise and Customs (CBEC). To this end, a core group of auditors needs to be trained in the use of computerized audit techniques.

1C This CAAP Manual has been designed to serve as a 'procedures' handbook' for auditors who are required to audit data or records maintained electronically by assesseees. It has been jointly developed by three nodal centres established in Indore, Bangalore and Ahmedabad in 1999-2000 under the overall guidance of Director General (Audit) or DG Audit.

1D CAAP functions within the overall framework of the Excise Audit 2000 (EA-2000) Scheme. Therefore, the entire audit process is regulated by the *Central Excise Audit Manual (CEAM)*, which was first prepared in 1999, and thereafter, updated in 2001, 2003, and 2008. Hence, the broad framework of EA-2000, as currently laid down in CEAM 2008, is referred to throughout this manual.<sup>1</sup>

1E This manual only covers the policies and procedures related to computer assisted audit (CAA) dealing exclusively with the study, procurement, and analysis of electronic records. It

<sup>1</sup> It is strongly recommended that the auditor expecting to use the CAAP manual go through *EA-2000 Manual* as well as the *Audit Report & Working Papers*, Participant Manual in detail. Additionally, the *Study of Financial Records and Understanding of Audit Techniques* published by the Fiscal Laws Committee of the Institute of Chartered Accountants of India (Publication # 06FLC00014) should also be reviewed thoroughly in order to gain familiarity with the detailed instructions, procedures, and steps of Central Excise Audit.

does not deal with any legal interpretations and rulings on Central Excise matters. Further, it does not cover aspects related to computer programming, systems designing, or detailed instructions as to how to use the data retrieval software available. Auditors should refer to the training manual and software help resources for instructions related to the use of data retrieval software such as WinIDEA.

## 1.1 OWNERSHIP

1.1A The CAAP manual is the property of the Department of Central Excise and the staff to whom it is issued remains responsible for its safekeeping. It is to be strictly used for departmental purposes only.

## 1.2 AMENDMENTS

1.2A Future amendments the Central Excise Act, Central Excise Rules, administrative policies and procedures may entail revision of this Manual. It would also benefit from regular updations to incorporate key lessons learnt from the field experience of auditors who actually conduct CAAs. DG Audit may publish amendments to this effect as required. Users are also encouraged to offer suggestions for improving the layout and content of the Manual to make it more comprehensive and user-friendly. These suggestions may be forwarded to the DG Audit through the concerned jurisdictional Commissioner.

# Chapter 2: Role and Mandate of the Program

2A As mentioned in Chapter 1, CAAP as a part of EA-2000 is designed to assist in the auditing of assessee who use computerized accounting software to maintain records in electronic format. They may not always maintain comprehensive records simultaneously on paper. Therefore, it is both prudent and strongly suggested that even in situations where paper records are available, CAAP be considered for auditing purposes.

2B CAAP is envisaged as a program which initially provides training to select auditors in CAA techniques to enable them to undertake all aspects of audit work. As the program matures, it should be able to create a pool of experts who no longer handle the entire audit process from end to end, but lend their technical expertise to other auditors and undertake only those parts of the audit that deal with electronic records.

## 2.1 ROLE

2.1A The role of CAAP in Central Excise Audit of electronic business records encompasses:

- identification, acquisition, and processing of electronic data;
- verification of completeness of electronic records and existence of reliable audit trails;
- analysis of electronic records (as per EA-2000) in line with the audit plan.

## 2.2 MANDATE

2.2A The mandate of CAAP is to provide specialized audit services to verify assessee compliance with Central Excise and Service Tax legislation.

## 2.3 PROGRAM OBJECTIVES

2.3A The primary objective is to ensure that CBEC maintains its ability to audit electronic records through a national program of CAA delivered by a group of trained specialists. The elements of this program include:

1. CAAP Manual (this manual)
2. CAAP Training Course. This training includes:

- introduction to Computer Assisted Audits (how to do CAAs), and
  - use of special audit software such as IDEA.
3. Trained CAAP officers
  4. CAAP equipment and software, consisting of:
    - laptops and desktop computers;
    - IDEA software; and
    - other hardware and software required to import, read, and analyse assessee records.

## Chapter 3: Legislative Framework

3A Legislation related to maintenance of books and records makes it mandatory for the assessee to maintain electronic records and to provide them to the Excise auditor for review during an audit.<sup>2</sup>

3B This legislative framework is presented in Annexe A for reference. Annexe B appended, is the CAAP pamphlet, which acts as a ready-reckoner for the assessee by including a comprehensive explanation of the CAA process, outlining its benefits and answering FAQs while defining the authority of CAAP in unambiguous terms. It is recommended that the auditor print and provide this pamphlet to the assessee at the outset of an audit. Simultaneously, a discussion should be held wherein it should be impressed upon the assessee that a full disclosure of all electronic records is imperative and the auditor has complete authority to demand access to such records. Where necessary, support from senior officials should be sought to persuade the assessee to comply.

<sup>2</sup> Part III of Chapter VI of CBEC's Central Excise Manual of Supplementary Instructions 2001 lays down the statutory requirement of the electronic maintenance of records. Rule 22 (3) of Central Excise Rules 2002 makes it mandatory for the assessee to fully reveal and provide such records to the excise auditor during an audit.

# Chapter 4: Program Management Framework

## 4.1 WORKLOAD REVIEW

### 4.1.1 Survey

4.1.1A In order to gauge the workload of CAAP officers, it is necessary to estimate the number of assessees using electronic records as well as the systems and software types they use. This information can be collected through questionnaire-based surveys (within each Commissionerate) seeking from assessees, details of computer systems in use, electronic records maintained, business accounting packages applied, and other related specifications. Once data is compiled through the initial survey, an update could be sought as and when an audit is envisaged.<sup>3</sup>

### 4.1.2 Selection of Units

4.1.2A The data collected through the survey may be compiled by each Commissionerate and a database developed based on which probable units for CAA may be short-listed. **The selection of assessees for audit remains based on standard risk assessment norms which are uniformly applied to all assessees regardless of the mode of record maintenance, electronic or otherwise.** CAAP and related procedures merely assist in conducting audits of those that are so selected.

### 4.1.3 Annual Plan

4.1.3A In order to draw up a viable annual plan (audit schedule), it is recommended that the short-listed units be formally evaluated through the Computer Assisted Audit Feasibility Evaluation (CAAFE) process within the first quarter of the financial year thus allowing assessees to plan out their activities for the year keeping in mind the period during which the Departmental audit is scheduled.

## 4.2 INFRASTRUCTURE REVIEW

4.2A While infrastructural capabilities of CAAP labs need to be regularly assessed, a comprehensive review of available infrastructure at the onset of every financial year is

<sup>3</sup> A copy of this survey questionnaire is attached as Annexe C.

imperative in each Commissionerate. This would allow a proper assessment of the capability of the Commissionerate to perform CAAP audits. Required upgradation work can also be done in a planned and timely manner.

4.2B The review should examine critical elements such as adequacy and training of staff, both new and existing, as well as adequacy of software and hardware infrastructure. The report should then go on to make recommendations about additional staff, training, equipment, and software requirements. The report and accompanying recommendations should be forwarded to both the local Commissioner as well as a functional authority such as the DG Audit.

4.2C Ideally, such a report should be prepared and forwarded to the Commissioner and DG Audit before the start of each fiscal year so that staffing or hardware acquisitions can be incorporated into local budgets.

# Chapter 5: Steps in a Computer Assisted Audit

5A A CAA is basically an EA-2000 with certain additional steps. These are:

1. Conduct desk review from CAAP perspective.
2. Submit a letter to the assessee (along with survey questionnaire as well as a request for assistance in carrying out CAA)
3. Develop a description of the assessee's computer and accounting system (if not done through survey).
4. Review the assessee's accounting system.
5. Undertake a Computer Assisted Audit Feasibility Evaluation (CAAFE).
6. Arrive at a GO/NO GO decision based on the CAAFE, that is, whether to go ahead with CAAP or not.
7. Lay down CAAP objectives as per EA-2000 audit plan.
8. Data Transfer
9. Data Preparation
10. CAAT (Computer Assisted Audit Techniques) or Verification
11. Preparation of Audit Report
12. Back-up

## 5.1 DESK REVIEW

5.1A As in EA-2000, the first step in a CAAP audit is to perform a desk review of the assessee's previous CAAP audit(s), if any, and other relevant information available in the Commissionerates. For instance, if the previous CAAP audit resulted in a 'no go' decision, the auditor should take note of the recommendations made to the assessee. A follow-up must then be carried out during the current CAAP audit to ensure that the assessee has complied with those recommendations.

5.1B EA-2000 audit objectives for the assessee unit, already articulated by now, should be properly understood and preliminary notes created on what the auditor wishes to accomplish through CAAP. These would constitute the preliminary CAAP plans.

## 5.2 LETTER TO THE ASSESSEE

5.2A It is appropriate to send a letter to the assessee advising him on the proposal to use CAAP during audit. The letter should also request assistance from the assessee in the identification of contact persons for information on computer and accounting systems, access to office equipment and copies of electronic accounting records (data).

5.2B If the desk review indicates that the assessee's computer and accounting systems have never been surveyed, then the assessee should also be asked to complete the CAAP questionnaire at this time.<sup>4</sup> Along with this letter, the CAAP pamphlet (Annexe B) may also be forwarded for ready reference.

## 5.3 ASSESSEE SYSTEM DESCRIPTION (IF NOT DONE THROUGH SURVEY)

5.3A If the systems description is not available through survey and not received in response to written request above, the CAAP auditor must complete the survey during the visit to the assessee by interviewing the relevant computer and accounting staff. This is required not only for the current CAAP audit, but would also be useful for future CAAP work.

## 5.4 ASSESSEE ACCOUNTING SYSTEM REVIEW

5.4A The scope and extent of Accounting System Review (section 5.4) and Computer Assisted Audit Feasibility Evaluation (section 5.5) depend largely on the complexity of the assessee's systems. For small and simple set-ups involving off-the-shelf systems, these steps would not need extensive review and some could even be skipped. However, the reason for skipping steps should be properly documented.

### 5.4.1 Gathering & Documenting Accounting Systems Information

5.4.1A The first step in the review of the assessee's accounting system involves gathering information on various aspects of the systems and operations. Some of this information may already have been collected through the survey. If however, the survey was not undertaken or the relevant information is incomplete for some reason, the required data can be collated through interviews of various persons and the retrieval of related documentation from persons representing concerned departments of the assessee.

#### *Review the Accounting System*

5.4.1B The assessee department of foremost importance in this context is the Department of Finance / Accounts since our major area of interest lies in the financial or accounting subsystems. These systems are used to prepare the financial statements on which all tax and information returns are based. The examination of business systems, however, should also include fixed assets, maintenance, share treasury, credit control etc.

<sup>4</sup> Please refer to Annexe D for letter and Annexe E for CAAP Assistance Request

## *Business System Structure*

### MAJOR ACCOUNTING MODULES

5.4.1C The major accounting modules where most of the data relevant for CAAP Audit can be found are:

1. General Ledger
2. Accounts Receivable
3. Sales
4. Accounts Payable
5. Purchases

5.4.1D The General Ledger Module provides the transaction history and the account trial balance. The accountants, in preparing the adjusting and closing entries, use the trial balance as a starting point. Some accounting systems incorporate the adjusting entries and closing entries into the transaction history while others do not. The CAAP audit would require the auditor to show and document how the information contained in the General Ledger Module relates to the information filed in the tax returns.

5.4.1E The General Ledger Module usually draws information from other modules (or sub-modules, such as Sales or Accounts Receivable). The nature and magnitude of the detail transferred from the sub-modules to the general ledger would determine the number of sub-modules that would require inclusion in the review of the assessee's accounting system. If relevant details are transferred to the general ledger in full, then the sub-modules need not be scrutinized very closely. If, however, the information transcribed to the general ledger from the sub-modules is summarized (for example, only periodic totals are posted to the general ledger), then the sub modules must necessarily be analyzed in detail and the basis of summarization clearly identified.

### MINOR ACCOUNTING MODULES

5.4.1F The minor accounting modules could either feed the general ledger or another sub-system. They are often specific to each industry and include:

1. Payroll System
2. Purchase Order System
3. Receiving System
4. Shipping System
5. Inventory System
6. Manufacturing Cost System

5.4.1G Similar to major accounting modules, here too, care must be taken to ensure that sub-modules from which information outflow is drawn (in summarized form), are examined closely. The basis for summarizing should be fully understood by the CAAP auditor by the end of the accounting systems review process.

5.4.1H The interlinkages between modules must be clearly understood. For example, the Receiving System is generally linked to the Purchase System through the use of purchase orders. Goods received are tallied with the purchase orders before they are placed in the inventory.

#### NON-ACCOUNTING SYSTEMS

1. Fixed Asset Inventory
2. Maintenance Scheduling and Tracking

5.4.1I Non-accounting systems do not generally feed information into the General Ledger or the accounting sub systems. However, they may still be of interest to the auditor. Examples of issues that could involve non-accounting systems include capital improvement versus current expense and corporate reorganization.

5.4.1J The auditor is expected to acquire, through interviews with assessee personnel, a wider perspective on the factors that lie beyond the core business system and yet influence the business design and operational practices. Without an understanding of these externalities, a comprehensive and holistic view of the business system operation is not possible. These factors include:

1. Business overview: Internal and external information requirements
2. Corporate entity relationships: Corporations, divisions, branches, and functions and the translation of these interrelationships into the way the accounting is done. For instance, the chart of accounts (see section 5.4.3) might show different account numbers for each division, different prefixes for invoicing and/or purchase orders for each division etc.
3. Corporate Organizational Structure: The key personnel in charge of authorization/approval of transactions
4. Integration of Business System: Degree of integration and methods for transfer of data on transactions. It needs to be ascertained for example, how the sales/invoice system is linked to the shipping system.
5. Internal Control and Audit Trail: Confidence in the integrity and completeness of the data.
6. Distributed Data Storage and Processing: The distribution of data storage and processing and the impact of this on the accessibility of the data by the CAAP auditor. Questions that may arise include: does each division keep its own accounting data or is it maintained centrally?
7. Backup and File Retention Policy: Disaster recovery backups or file archiving. In case the fiscal period being audited is more than one year prior to the date of audit and the old data are no longer available on the current system, the kind of back up practices of the assessee will be pertinent. The assessee would obviously need to provide relevant accounting data to the CAAP auditor from the backed-up sources.

8. System Types: Batch systems versus real time systems. This is important only in the case of large assessees who use batch processing through mainframe computers. In batch processing, individual transactions such as sales are not 'posted' to the accounting system as and when they occur during the day, but at the end of the day, when they are all processed in one batch.

5.4.1K The examination of the assessee's accounting system and data accessibility and completeness are consistent with and pertinent to the purposes of the CAA. All roadblocks and hurdles encountered and cleared by way of this exercise are part of the process entitled: *obtaining and preparing the data required for performing the audit.*

## 5.4.2 Data Flow Diagrams/System Flow Charts

5.4.2A Data flow diagrams / System Flowcharts are designed to represent the processes that are performed by the application program. The diagrams show the source of the information, the processes it goes through, and the output generated. Data flow diagrams provide a complete easy-to-understand description of the business process. These diagrams are used in the industry to document business processes and systems used.<sup>5</sup>

5.4.2B Programming flow charts are designed to show the programming logic for a specific program or module. These charts may be of high or low level of detail of programming logic depending on the programming language being employed and the specific use of the chart. While not as handy as data flow diagrams, programming flow charts can also be used to extract most of the information found on the data flow diagram.

## 5.4.3 Analysis of Chart of Accounts

5.4.3A Basically, a chart of accounts is a detailed list of account numbers and account names. It may sometimes include a description for each account as well. However, in case of computerized accounting systems, the chart of accounts also represents how the accounting system is organized.

5.4.3B A thorough analysis of a chart of accounts, through examination and inquiry, allows the auditor identify specific accounts that would be of interest to the auditor, such as duty payable, duty paid, MODVAT credits, MODVAT utilized, jobbed goods, etc. Analysis of the chart of accounts also helps the auditor to understand relationships across related accounts, such as may exist between various types of receipts, various types of expenses, types of assets and so on. Understanding the chart of accounts is crucial to grasping the relationship between transactions, the source documentation and the final reporting of the transaction.

5.4.3C The chart of accounts will vary with the type of business, number of businesses, their locations, legal entities involved, accountability of each component of the business, legal requirements of each business, management information requirements, and control

<sup>5</sup> Check Annexe F for samples

requirements (such as the ordering and categorization of each account). All these factors determine the potential complexity of the chart of accounts. The chart of accounts often provides the coding used to group the accounts for financial statement presentation.

5.4.3D The key to analysing the chart of accounts optimally lies in discerning the precise level of detail that is required for the Excise and/or Service Tax audit. The chart of accounts may go into details pertaining to a specific location (for instance, a room in a building) while the auditor may only be concerned with testing at a major, minor, or sub-account level. The chart of accounts must be clearly understood in the proper context of the audit and documented to ensure thorough understanding of the business system.

#### 5.4.4 Analysis of Reports Generated

5.4.4A The auditor should review the standard reports generated by the accounting system as well as any specialized report that is available. The trial balance itself is a report listing of the balance for each general ledger account at a specific date, and is prepared at different levels of detail for different purposes. Other reports which need to be examined include financial statements, general ledger, journals, transaction histories, and industry-specific reports such as manufacturing schedules, inventory reports, production reports etc. The purpose of reviewing these reports is to determine the level of detail at which the information is available for scrutiny. Once this is determined, most business systems, when combined with the operating system, allow for the export of the report to either a print file or a spreadsheet file.

5.4.4B In the absence of a chart of accounts, a trial balance could be used as a substitute because it is a list of ALL account balances as on a specific date. By default, it would list ALL accounts. However, accounts with zero balance might be omitted. It is therefore necessary to verify whether accounts with zero balance are listed in the trial balance or not. A trial balance could be used for the purpose of chart of accounts only if zero balance accounts are all listed in it.

#### 5.4.5 Analysis of Record/File Layouts

5.4.5A Review and understanding of the data dictionary, table descriptions, and record layouts are an integral part of the CAA. The data dictionary is a term which means different things in different contexts. The term normally refers to that module of the system which stores definitions of the various constituents of the database. Each implementation stores a different amount of information and provides a unique view of the information to the user. The data dictionary contains the information required to prepare record layouts for a file.

5.4.5B The record layout typically provides a granular list of the field name, field type, field width, and the number of places after the decimal point, as well as the order of the fields in the record. Some layouts provide additional details or display the information in an alternate form. The record layout is critical to determining information availability and in interpreting electronic records received from the assessee. It is imperative that the records

layout or data dictionary information be accurate. Inaccurate layout, most often due to the absence of updated system documentation by the assessee, can lead to misinterpretation of records or worse, inaccurate conclusions.<sup>6</sup>

5.4.5C An auditor must be aware that compression techniques may have been used to allow the system to minimize the space required to store data. The simplest way to reduce space is to remove the decimal point and use the record layout to provide the number of digits after the decimal point. An alternate compressed data structure, called Packed Decimal, reduces the space required by half. Variable length data files remove space that is not used in each record. Relational database structures replace the data common to each record with a code pointing to the information in another file. Overlays allow the system to utilize the same space in a data record for multiple purposes. This method is based on the assumption that data records will have some information which is common to all data records, and some information which is specific to each type of record. Other compression methods such as WINZIP, that do not alter any data but just compress using a special algorithm and require the same algorithm to reverse or decompress, may be encountered. Each method has to be analyzed and understood to prepare for the audit. To utilize the information contained in a data file, the auditor must convert the file to a usable form.<sup>7</sup>

## 5.5 COMPUTER ASSISTED AUDIT FEASIBILITY EVALUATION

5.5A Once the auditor is ready with the list of selected units, the assessee may be contacted in order to proceed with the Computer Assisted Audit Feasibility Evaluation (CAAFE) process. Specified parameters are used to evaluate the feasibility of conducting CAA of the unit under consideration (see Box 5.1). At this stage, the assessee is formally informed of the Department's intention to perform CAA of their records. In this regard, a letter is sent to the assessee specifying the background of CAAP, its legal sanctity, the period of audit and the probable date of visit for carrying out CAAFE. Along with this letter, the pamphlet on CAAP may also be forwarded.

5.5B On the appointed day, the auditor must contact the tax manager or finance in-charge within the company as well as personnel from the IT department of the organization. Alternately, the IT resource could be an external consultant or any other member of the assessee's organization who has sufficient knowledge of the systems in place, and who would be able to assist the auditor. A mutually convenient work station on the assessee's premises may be identified, and consensus reached on permissible access to office equipment. Disturbance or disruption of the assessee's system resources must be avoided.

<sup>6</sup> Refer to 'Verify the Test File' in section 5.5.5 entitled Data Transfer Mechanism.

<sup>7</sup> Refer to Annexe G entitled Assessee (Accounting) Systems Review. Detailed information on various financial as well as taxation-related aspects required to fill out the above Annexe could be obtained through interview of Computer and Accounting Systems personnel.

#### BOX 5.1 : PARAMETERS FOR CARRYING OUT CAAFE<sup>8</sup>

- Period of Computerization
- Nature of Computer System
- Extent of Computerization & Level of Integration
- State of Documentation
- Data Transfer Mechanism

### 5.5.1 Period of Computerization

5.5.1A It must be ascertained whether the assessee has maintained computerized records for the proposed period of audit. In this regard, necessary information regarding the said period and extent of implementation of various accounting packages should be acquired. CAAP audit can only be undertaken if the assessee has maintained adequate data for meeting CAAP objectives, either in full or at least to a substantial extent. If the assessee has retained data for only a limited period and/or for some of the computerized systems, a partial CAAP audit of available period/systems should be considered. At the same time, the assessee must be reminded that it must retain data for all of the systems and periods in accordance with the legislation.

### 5.5.2 Nature of the Computer System

5.5.2A Information provided by the assessee in the survey questionnaire regarding existing hardware, operating system, file formats, data retention policy, size of annual database etc. must be verified. The software system profile should be scrutinised keeping in mind the viability of audit and requirements of eventual data transfer. Details of any anticipated change, such as upgradation in the immediate future as well as specifications of the technical support vendor of the assessee in terms of the name of the resource persons, contact addresses, and telephone numbers, must also be obtained from the assessee.

### 5.5.3 Extent of Computerization & Level of Integration

5.5.3A At this stage, the auditor should determine which business modules are computerized and whether the extent of computerization is sufficient for a computer-assisted Central Excise Audit exercise to be conducted. It is desired that some of the modules—Sales, Accounts Payable, Accounts Receivable, General Ledger, Purchase, Invoicing, Inventory, and Taxation—be computerized in order to consider the use of CAA techniques. Further, multiple packages in operation if any, must be identified, as also the degree of integration across various business modules. A flow chart of information streams between modules may be handy in identifying the major linkages and key fields.

<sup>8</sup> Please refer to Annexe H

## 5.5.4 State of Documentation

5.5.4A A brief preview of the documentation maintained by the assessee in respect of the business system would provide a sense of the specific help (material/documentation and technical assistance) that would be available both during data transfer as well as the business system evaluation process.

5.5.4B It should be noted that in case of small to medium sized assessee, documentation would likely be scarce and many of the items discussed below, with the exception of the chart of accounts and the coding table, would not exist. Therefore in such cases, only the chart of accounts and coding table (also called coding chart) should be obtained and reviewed.

5.5.4C Documentation verification would include:

### *System Design Documents*

5.5.4D System design documents consist of some or all of the following:

- Data flow diagram
- Chart of accounts
- Special coding chart
- Data dictionaries / Record layouts
- Retention policy
- Archiving method

### DATA FLOW DIAGRAM

5.5.4E This document would give an idea of data flows from one subsystem to another, for instance, how sales invoice information flows to accounts receivable.<sup>9</sup>

### CHART OF ACCOUNTS

5.5.4F This is one of the most critical documents in any audit, more so in a CAAP audit exercise. This document provides a list of all the accounts and sub-accounts, their numbers, and sometimes, descriptions. Often, the chart of accounts is organized into groups such as assets, liabilities, owners' equity/retained earnings, revenue and expenses. It is not uncommon for business records to only contain account numbers. A chart of accounts, in such situations, gives meaning to these account numbers for the auditor.

5.5.4G In case the assessee is not able to provide a chart of accounts, the auditor could use a trial balance as a substitute of last resort. It must be remembered that a trial balance will not include a full chart of accounts as accounts with zero balance might not be listed in a trial balance.

<sup>9</sup> Refer to Annexe F

## SPECIAL CODING CHART

5.5.4H These charts (also called coding tables) provide the key to the codes used in accounting and records of transactions. For example, sales could be coded as zero, 1, or 2. The coding chart might indicate that the code number in the tax column implies that 0=exempt, 1=regular rate of duty, and 2=reduced rate. Codes are used in data processing for many items, product type code, factory code, date code, salesman code, and so on. Hence, code tables are a must, especially those codes that impact calculation of duty liability.

## DATA DICTIONARIES/RECORD LAYOUTS

5.5.4I Data dictionaries and records allow an auditor to make sense of the raw data. The Data dictionary identifies each data element and defines the type of data that it is. It could be numeric (further defined with decimal places), alphanumeric, character, logical (Yes/No, True/false, etc.), or date (YYYYMMDD, MMDDYY)

5.5.4J Record layout shows the sequence of data organization in a record of transaction. For example, a sales invoice may be organized by invoice date followed by invoice number, client name, address and so on, in the various fields.

5.5.4K Often, the data dictionary and record layout are both rolled into one document. The combined document is called either a data dictionary or a record layout.

## BACKUP/RETENTION POLICY

5.5.4L Most medium and large assesseees have a firm policy in place on how long historical records are retained. In larger businesses, there might be different retention policies for different types of data. For example, general ledger records are likely to be retained for a longer period than other records.

## ARCHIVING METHODS

5.5.4M Archiving is the process of backing up and removing for storage, historical records that are no longer required for day-to-day operations. Based on the volume of records and the size of the computer system a company could archive historical records on a monthly, quarterly, or annual basis. It could also be something that needs to be done once in several years.

5.5.4N Generally, the period being audited is at least one year prior to the date of audit (sometimes more). Hence, it is likely that the data relevant for the audit exercise will be available in the archives. In situations where data has been archived in compressed form in order to maximize storage capacity, the auditor will have to ask the assessee to extract and restore the records so that they may be used in CAAP audit.

5.5.4O In case the assessee does not practise proper retention and regular archiving of historical records for the length of time stipulated by the Excise legislation, the auditor must

notify the assessee of the lapse in writing and instruct him to immediately put the requisite record maintenance and archival processes in place for the future.

#### RESTORATION PROCESS

5.5.4P As indicated earlier, restoration of records from archived status to readable and usable status must be undertaken by the assessee at the behest of the auditor. The technologies used in archiving (compression formats) and storage (recording format and media) are so diverse across assessees that the auditor should not consider doing it himself/herself.

#### *Listing of Various Reports Generated by the System*

5.5.4Q Many assessees would have in their documentation, a list of standard reports that are produced by their system on a regular basis for internal or external circulation. This could be a single consolidated list or a compendium of lists categorized by divisions such as Sales, Purchases, and so on. The auditor is well-advised to obtain the relevant list/lists from the assessee along with samples of listed reports that may have a bearing on Excise duty liabilities.

#### 5.5.5 Data Transfer Mechanism

5.5.5A Once the assessee's computer systems are fully understood, a viable method for data transfer is not difficult to identify which is compatible with the resources available with the auditor. In the absence of such compatibility, it is important to figure out which compatible facility the assessee can provide. A test file may have to be transferred to test the data transfer mechanism.

#### *Test Data Transfer*

5.5.5B Testing verifies that the process established for extracting the data from the business system under evaluation really works. It helps to minimize the time lost in incorrect development and design. Testing ensures that the files ultimately received are in a workable form.

#### *Create a Test File*

5.5.5C The most common method of testing is to create one or more test files from the assessee's data. The test files should contain as many variants as possible, one each from the Sales module, the Purchase module, and so on. This allows the auditor to identify situations which can cause the system to fail and hence, make suitable changes, additions, or deletions in the data transfer mechanism before the actual extraction begins for the audit. Though the inclusion of a wide range of variants makes the design of test files and the data included fairly complex, specific transactions must be selected with care to ensure the majority of possibilities are represented. The selected records must be copied or created and then saved in a file for testing its transfer.

#### *Selection of Data Format (and obtaining records layout)*

5.5.5D Once complete data files or specific transactions have been identified for inclusion in the transfer testing process, it is necessary to determine an appropriate data format initially

for the test exercise, and ultimately for the audit process. Assesseees may store data in a proprietary format or in one of the existing non-proprietary (public or generic) formats such as ASCII (or text), EBCDIC, or common database formats (such as DBF, CSV, MSAccess or MSEXcel).

5.5.5E The IDEA software, in general, does not read data that is in proprietary format. So it is necessary to obtain data in a non-proprietary format from the assessee. In most cases, this does not pose a problem for the assessee. The systems that keep data in a proprietary format have the facility or option to export data or reports in a format that is readable by the IDEA software. A CAAP auditor is NOT an expert in data conversion from one format, especially a proprietary format, to a public format that is readable by IDEA software. Training in such conversion is beyond the scope of CAAP training. It is therefore, critical to put the onus of providing the electronic records (data) in a format that is readable by the IDEA software and does not require further conversion, on the assessee.

5.5.5F While receiving test data in a non-proprietary format, it is necessary to obtain a record layout as well as coding details mentioned earlier. Since DBF or CSV records have the record layout 'embedded' in data, it is not necessary to obtain the record layout separately from the assessee for these formats. It makes CAAP work much less onerous. IDEA is able to read DBF/CSV records automatically. A coding table is still required, if applicable. Receiving data in such formats permits the auditor to focus on the core CAAP exercise and not on verifying record layout (often not kept up-to-date by the assessee) and dealing with systems personnel to obtain correct and up-to-date layout.

5.5.5G In the worst-case scenario, any assessee would, at the very least, be able to create 'print reports' and save them as print (that is, Text) files which IDEA is able to read with some effort by the auditor. This alternative is not at all advisable for a novice CAAP auditor. The novice auditor is well advised to ask for data in DBF/CSV, or MSEXcel or MSAccess format only.

5.5.5H To sum up, the most preferred arrangement would be one in which the original data is converted to DBF, CSV, MSAccess, or MSEXcel. In common practice, for obtaining test data, the original data is extracted using a query language, utility or report generator from its native state (that is, proprietary database) into a data file in:

- DBF, CSV, MSAccess or MSEXcel
- ASCII, EBCDIC format
- Print report data in Text or ASCII

### *Test Transfer Mechanism*

5.5.5I The rationale of testing the transfer mechanism is to verify that the desired data can be obtained using the process determined. The complete transfer mechanism must be tested to avoid unexpected results that may be encountered at any stage in the process. Testing of the transfer mechanism is not necessary in case of smaller installations that use off-the-shelf

systems such as basic versions of Tally. It is however, highly recommended for larger installations, particularly those using mainframe computers and/or systems such as SAP, Oracle, and Peoplesoft etc. The transfer testing procedure also yields additional information in terms of estimating time that will be required in the actual transfer to be undertaken during the audit. The test file should be created based on the actual data files being used. If there are multiple files, a sample of each type should be transferred.

5.5.5J The best means of transferring (obtaining) test data from the assessee's computer to the auditor's computer is through a removable media such as a diskette or a CD. It should be possible for most assessees to provide data on a diskette or a CD. For other options, please refer to section 5.8 below.

### *Verify the Test File*

5.5.5K Once the test file has been created and the transfer mechanism verified, the file transferred must be checked to ensure that it contains the same information as the source file. Browsing the file is a quick method to ensure that the data appears appropriate and corresponds exactly to the record layout. Comparing the file with the information anticipated can be done quickly. The occurrence of unexpected blank spaces can easily indicate a problem. Verifying the test file will ensure correct interpretation of data based on record layout and coding tables and avoid errors in the analysis of electronic records. It will also identify an outdated record layout or coding table/chart and alert the auditor to it before he/she has proceeded too far. If the file is transferred in its exact form, the file size will remain the same before and after. A record count should tally the number of records before the transfer and after. The number of records should agree with the number of transactions selected from the source file.

5.5.5L Summary totals may be verified to ascertain that the total of all transactions equals the total calculated in the business system. In a General Ledger file, debit amounts and credit amounts should be equated and the 'total amount' fields should reflect zero. Statistical or non-financial entries could yield erroneous totals and the auditor would need to watch out for these.

5.5.5M Boundary testing is used to verify that the transactions cover the entire selection. For example, the complete fiscal period should be covered while not including any transaction from before or after the period.

## 5.6 GO/NO-GO DECISION

5.6A After reviewing the assessee's system on the basis of above parameters and outcome of testing the data transfer mechanism, a feasibility report recommending a CAAP audit or otherwise for the assessee in question has to be submitted to the Supervisor for taking a formal decision in this regard. This brings the CAAFE process to a close.

5.6B During the course of CAAFE, the auditor may come across situations where certain assessee systems fall short of required standards in a couple of parameters for an ideal CAAP audit. However, that does not necessarily mean that CAA cannot be performed at all. If sales and/or purchase files are usable but not the raw material or inventory file, it might still be desirable to proceed with CAA on available files and revert to traditional (that is, paper-based audit) review of the other areas.

5.6C The go-no go decision depends on the viability of conducting an electronic audit based on EA-2000 audit objectives and the specific circumstances of each case. The concerned audit party, along with the Supervisor, is the best judge in this regard.

## 5.7 CAAP OBJECTIVES AS PER EA-2000 AUDIT PLAN

5.7A CAAP objectives are determined on the basis of the EA-2000 audit plan (as updated in the CEAM 2008) and supplemented by observations made during the Assessee Accounting System Review. The review process is expected to have given the auditor a clear sense of system weaknesses or linkages. Linkages such as these could exist between the Receiving System used for CENVAT credit and amounts posted in accounts payable or between CENVAT credit and inventory systems with respect to reversal of MODVAT credit for return of purchased goods.<sup>10</sup>

## 5.8 DATA TRANSFER AND REVIEW

5.8A The data may be stored on a mainframe, mini or microcomputer and may be available on tape, cartridge, and diskette or via a network/communication link. Fortunately, over the past years, technological options for connecting different computers together and enabling information to be transferred have been growing. The auditor is well advised to explore various alternatives from among the existing options available at the assessee's premises and choose the one best suited to the purpose of the audit.

### BOX 5.2: CONFIDENTIALITY OF ASSESSEE INFORMATION

The security of assessee's accounting data is of utmost importance. Inadvertent disclosure could expose the Department and the Commissionerates to complaints and legal action. The accompanying publicity could make it difficult to convince assessees to provide accounting data to Departmental auditors in the future.

The auditor must NEVER ask for or accept original electronic records. It must be a copy. The receipt provided to the assessee must make it clear that the auditor has only received a copy.<sup>11</sup>

<sup>10</sup> A sample set of forms to be used for CAAP objectives is enclosed in Annexe I

<sup>11</sup> Refer to the Chapter 6 for various precautions to be taken to ensure that assessee accounting data is handled in strictest confidentiality.

5.8B In recent years, USB storage devices (also called Pen Drives) as well as recordable CDs and DVDs have offered easy means of transferring a copy of the assessee's accounting data to the Departmental laptop or desktop computer for CAA. This is the most preferred method of data transference today. Only when the above option is not available should the auditor consider other options because these alternatives, some of which are listed below, require expert knowledge and only an experienced auditor can successfully implement them. These include:

- links from standalone PCs to a mainframe using terminal emulation which includes file transfer;
- networks of various designs which allow files to be copied;
- tapes and cartridges.

5.8C Though the data may be acquired through any of the mediums listed, it should finally be retained on a One Time Write media such as a recordable CD (CD-R) (in duplicate) in order to maintain its evidential value. One copy of the CD-R could be handed over to assessee for its records, the receipt of which should be taken under the Memorandum presented in Annexe J.

5.8D In the event that the creation of a test file and a verification of the transfer mechanism did not precede the data transfer for whatever reason, problems could arise which would require attention. For example, the assessee may have upgraded his hardware since the previous CAA rendering it incompatible with the auditor's equipment. The environment is continually changing and repeated verification of the functionality of the transfer mechanism each and every time is an absolute must. If the file selected for the data transfer test had been only a part of the whole set, the auditor must keep this in mind and make suitable adjustments in time and space requirements to reflect the complete file.

5.8E The data transfer should be properly scheduled in case of CAAP audits of large assessees, to allow sufficient lead-time to ensure that the transfer can be completed while accounting for periods of routine maintenance of the assessee's computer, backup periods, unavailability of assessee support staff, hours of work at the assessee's business, etc. during which the assessee's system will not be accessible for data transfer. In general, data transfer should be accomplished with minimal disruption of the assessee's routine work.

### 5.8.1 Verify File Layout

5.8.1A It is very important to verify the layout of data received with the layout provided by the assessee or as determined for the test data. This will ensure the validity and the accuracy of the analysis of records that follows. A mismatch between the record layout document and the layout of data received is likely to create significant problems including incorrect audit results. This step is mandatory except in simple, off-the-shelf systems. Even in case of records received in DBF format, it is necessary to review the layout and to ensure that the codes tally with the coding information.

5.8.1B Any authorized staff can change the file layout used by the assessee. The assessee support staff schedules these updates unilaterally and the auditor may not be aware that they are occurring. If the assessee is using external support for systems management, they may not know when updates are scheduled themselves.

5.8.1C When the accounting system was analysed and evaluated, file layouts were determined and verified. The changes that may occur during the period of data file transfer will require that the auditor revisit the record layout and incorporate the changes appropriately. The file layout should be compared to a data dump in order to verify the validity of the file layout at the date of transfer.

## 5.8.2 Verify File Integrity

5.8.2A An important step at this stage is to verify the integrity of the transferred file. The integrity of the final manipulated file(s) used while performing CAAs must be verified repeatedly. It must be ensured that the files created **remain in balance** (whether in total or part) with the assessee's original file, **all transactions are accounted for, and no accounting records that need to be included in the analysis have been dropped inadvertently.** While the IDEA software will not permit the auditor to change any part of the original file, it is possible to make an error in selecting records or transactions when creating an extract or a report.

## 5.8.3 Trial Balance

5.8.3A Trial balance is one of the most important documents that is run or produced daily, weekly, monthly, or quarterly in an assessee organization. It is often a standard report which shows the closing balance as on the date it is produced, and the net balance in each and every account in chart of accounts. Normally, a trial balance at the closing period (such as, the fiscal year end) is very important. Sometimes, a trial balance at the beginning of a fiscal period could be useful as well.

5.8.3B By design, in a double entry book-keeping system, the balance in a trial balance must equal to zero. In other words, sum of all debits must equal sum of all credits. It is essentially important to ascertain whether all actual additions / deletions made in the system that is, the chart of accounts, are recorded in the documentation and constantly updated.

5.8.3C Another aspect, which is critical to data analysis, is the system of special codes used by the assessee. Most assessees use special codes (refer to coding charts described earlier) in their financial reporting for identifying locations, products, tax codes, valid line detail or opening balances, etc. More often than not, the auditor will need to seek from the assessee, a breakdown of the codes and also query the assessee on records that may need to be eliminated from the file in order to get a valid detailed transaction file. If the special code chart is updated regularly, a major obstacle can be averted.

## 5.8.4 Balancing Number of Transactions

5.8.4A Another important step in verifying the transferred file is to reconcile the number of **records going into** the transfer with the number of **records coming out** of the transfer.<sup>12</sup>

5.8.4B Balancing a file also involves tallying the number of records in the original file with processed results. For example, if an invoice filed with 1000 records is broken into two, one with dutiable sales and the other with exempt products, then the sum of number of records in the two files must equal 1000. This ensures that none of the records in the original files is missed. Sometimes, if the numbers do not match, the investigation of 'missing' records could show that there was a third type of sales, such as jobbed goods.

5.8.4C A sample of source documents should also be compared to individual transactions to ensure that they can be traced back to the source documents.

## 5.8.5 Balance Key (Amount) Fields

5.8.5A Balancing fields ensures that the file transfer or processing of files does not have errors. This is done by comparing the totals of the value fields (such as rupee fields) in original with those in the transferred or processed file(s).

5.8.5B The transferred files received from the assessee must be reconciled with their financial statements, tax returns, and information returns. The subsidiary ledgers must also reconcile with control accounts in the general ledger. This ensures that the records provided by the assessee are complete and comprehensive in every sense. Thus, the sum total of invoiced amounts in rupees in the sales file must agree with the year end total of sales revenues in the general ledger and the financial statements.

5.8.5C The validity of the file can be verified by creating a summary report of the file (key field summarization using *IDEA*). Once this is done, the auditor can then verify the summary totals against the assessee's financial statements and trial balance. The account level being used by the auditor, that is, sales by factory location or by division should be the same as the one the assessee is using in its annual financial reports. Once the auditor has reconciled as many accounts as possible, the assessee should then be asked to resolve any accounts that could not be reconciled.

5.8.5D One indication of a complete General Ledger file, for example, is that the control amount is always equal to 0. The auditor should use *IDEA* and select a control amount total for the file based on the amount field. If the balance does not equal 0 (that is, if total debits do not equal total credits), then the auditor needs to investigate and diagnose why the file is out of balance.

1. One way could be to index and summarize the file by month to see what the monthly totals are. Perhaps, only one of the months is out of balance.

<sup>12</sup> See section 5.8.2 on file integrity

2. The other option could be to index and summarize the file by a batch number or journal entry number to verify that each of the batch or journal entry totals balances out to 0.
3. IDEA can be used to create totals in the transaction files, which can be compared to the postings of the assessee's control account.
4. The auditor may create a summary report by account number to verify the transaction totals per account.

5.8.5E While obtaining files from the assessee, it is advisable to seek their trial balance and financial statements in electronic format. It could make the task of reconciling easier as IDEA could be used to match the auditor's summary to their trial balance electronically. The auditor should develop a clear understanding of the way in which the assessee rolls-up the accounts from the trial balance to its financial statements. If the file still cannot be reconciled to the assessee's records, this should be brought to the assessee's attention and necessary clarification sought.

5.8.5F It is important to remember that each file is unique. One may encounter an error in a particular file after having transferred a number of files without error. Each file needs to be verified and if a problem is encountered, the cause should be investigated. Diagnosis may be very difficult in some cases and the assessee's support staff can be very helpful in resolving such situations. Hence, consultation with the assessee's support staff is recommended at all stages. This becomes especially important when a problem is encountered. In the event that the error cannot be traced or resolved after a few attempts, it may be advisable to request another copy of the file.

5.8.5G On completion of data transfer, the next step is preparing data for Computer Assisted Audit Techniques (CAATs).

## 5.9 DATA PREPARATION

5.9A Assessee CAAP Survey maintained in the Commissionerate should be carefully examined. CAAP documentation (if any) available with the Commissionerate should also be thoroughly reviewed to understand data preparation work done in earlier CAAP audits in order to assess the nature of the exercise in the current round of CAAP audit. Else, the information gathered during CAAFE should be studied in minute detail. The desk review should be conducted as per general principles laid down in the Standard audit programme and the Audit Manual.

### 5.9.1 Identify Records/Fields Needed

5.9.1A The extent of records required for a particular audit may vary depending on the audit type and scope as well as the fiscal period under review. Similarly, not all fields within the assessee's records will be relevant for particular audits. In the case of smaller or simpler systems, it might as well be easier and practical to obtain all records in full. The assessee and/or the system might not have the capacity to eliminate unnecessary information.

5.9.1B At the outset, the fiscal periods under review for each audit assigned to a particular case should be identified. This is required since there may often be timing difference between the most recent fiscal periods available for Audit. It would be difficult to audit a calendar year (January to December) if the assessee's financial year is different (say, from April to March) as it would be difficult to use audited financial statements for verifying integrity of data received

5.9.1C It is important to verify that the system is dedicated to a single entity's books and records and that the assessee's records do not contain accounting files of other branches or divisions which are not included in the current audit.

5.9.1D Sometimes, it might be instructive to obtain ALL the records and then separate/extract records of the entity under audit. The whole set of related company records could yield information about inter-company transactions. The assessee should be able to provide the account number scheme or any other set of criteria used to separate various divisions. The decision to obtain ALL records as opposed to records of only the unit under audit should be made on a case-by-case basis.

5.9.1E It is important to question whether all the records of the entity being audited are contained on one system. It is not uncommon for divisions or branches of a business to maintain their own stand-alone systems and file structures. In such a case, extra care must be taken to develop a full understanding of the way in which information from the separate systems is integrated to arrive at the figures ultimately reported in the financial statements.

### *Fields*

5.9.1F Eliminating unnecessary fields or reducing the size of fields will reduce the space occupied by a file on the auditor's hard drive, thereby speeding up the process time of operations performed on the file. In case of very large units, it might be prudent to eliminate unnecessary fields and therefore reduce file size, BEFORE the transfer of records/file from the assessee to the auditor's computer.

5.9.1G It is essential that all fields containing references, flags, indicators, or relevant dates relating to physical documentation or supporting entry be included in the file acquired for audit. Given a choice, it is best for the auditor to obtain all the available data and then strip out the irrelevant data.

## 5.9.2 Determining if Modifications are Required

5.9.2A During the system review, the auditor will become aware of the format used by the assessee to create his data files and hence, be able to judge if the existing format is acceptable. If the existing format is not found to be compatible, the auditor will also have a sense of the options that exist on the assessee's system for making modifications. These are often made both, to files as well as to fields within files. For example, the auditor might need to modify date fields from say, text to number or date formats to facilitate sorting by date/month, etc.

Else, it might be necessary to change format of the accounting data file from say, native format of relational tables and/or proprietary format to individual record format (flat file, DBF or CSV).

5.9.2B The extent of modification and the stage at which it can be undertaken depends on the time available to the assessee's computer systems staff, their competence and level of cooperation, the drive space available on the different systems, and of course on the experience and expertise of the auditor.

### 5.9.3 Modifying the Format of Files

5.9.3A While it is preferable to modify file formats while the data files reside on the assessee's system, it may also be done on the auditor's system if necessary. The advantages gained by having the assessee modify the files on his own system are that it frees up both, the auditor's time and system for other activities or cases.<sup>13</sup>

### 5.9.4 Determining if Links for Joining Files are Required

5.9.4A Almost without exception, links are required for joining files or to add tables to files in order to bring together all the data relating to any particular transaction. There are usually master files such as Customer master, Product master, etc. Each file identifies a product / customer by product / product number. All details such as product descriptions and customer addresses are in the master file only. Normally, an assessee preserves available disk space by attaching master files or tables to the related data files through internal procedures only for a specific purpose such as generating reports or invoices.

5.9.4B The auditor must review the assessee's data dictionary or record descriptions and determine if a single file contains enough information for an auditor to identify and review the recorded transactions with confidence. If the data resides in more than one file, it will be the auditor's responsibility to identify which files should be linked and which are the fields that should be copied to the resulting joined files.

5.9.4C It may be useful to check with the assessee IT staff whether they could do this joining for the audit. They often have pre-programmed routines to do so. If this is possible, it will save a lot of effort for the CAAP auditor. Caution must be exercised to ensure that in such cases, all the required information fields are included in the joined output file. Additional caution is called for to make sure the joined output file is complete and balanced.<sup>14</sup>

5.9.4D If there is any uncertainty as to including or excluding fields, it may be necessary to consult with another experienced CAAP auditor who is posted at the same Commissionerate. If the auditor is unavailable, one can opt for the inclusion of all data as it can always be stripped out at a later date.

<sup>13</sup> Refer to Section 5.1.5: Select Data Format (and obtain records layout)

<sup>14</sup> Refer to Sections 5.8.4 and 5.8.5

5.9.4E In each case, where a joining operation is to be performed, the characteristics of the field common to both files must be identical.

5.9.4F Most CAAs will require common links such as:

- A General Ledger file joined with an Account Master using an account number.
- An Accounts Payable file joined with a Vendor Master using a vendor number.
- An Accounts Receivable file or a Sales file joined with a Customer Master using a customer number.
- A sales/invoice file joined with a Product master using product number – to create invoice file with descriptions of each product.

5.9.4G In addition, one may have to modify a detailed file or create an additional specialized file to meet the requirements of an audit objective.

5.9.4H At this stage, one should have all of the required files imported in the IDEA software, ready for analysis and audit. The audit should follow the CAAP objectives established earlier in Section 5.7 above.

## 5.10 CAAT

5.10A **Audit objectives should be verified by performing detailed CAA on the relevant files.**

5.10B The verification process in CAAP audit would normally include both automated as well as manual verification. While this handbook deals with automated CAAP processes, often some parts of audit plans require manual verification. In some cases, CAAP analysis might identify issues that must be completed manually. For example, CAAP might identify a large invoice involving jobbed goods. The validity of this invoice and the issue of jobbed goods would normally require manual procedures to confirm classification of goods and liability of duties on this product.

5.10C The entire process subsequent to file selection that is, performing various CAAs as necessary for the specific audit objective and the resultant findings, must be documented in detail.

5.10D The following paragraphs identify only the CAAP procedures.

### 5.10.1 Perform CAATs

5.10.1A CAATs involve extraction of accounting records of interest for follow-up (for example, errors, large items, questionable classification items, etc.) or of creating lists of accounting transactions that were, say, incorrectly classified. In all cases, the auditor would generate reports or extracts. The scope of these reports would depend on the CAAP objectives identified earlier. It is important to retain both the IDEA logic as well as the output report for future reporting and documentation purposes.

5.10.1B There are some reports that one would normally prepare for an audit such as the Key Field Summary Report(s) and sometimes a Stratification Report. Most reports are dependent upon the type of industry and the accounting system in use. Reports could also be created based on audit objectives, for example, invoices of over Rs10,000 involving jobbed goods. It is not uncommon for an auditor to come across a report, which the assessee has created and which he/she would like to duplicate.

5.10.1C A Key Field Summary Report using accounts and amounts is created, and used to reconcile with the Trial Balance to ensure that all company transactions have been included. Other summaries may be developed on vendors, customers, and joint ventures etc, depending upon the needs of the audit.

5.10.1D Stratification Reports are usually prepared on amounts on an account-by-account basis to save time and improve audit efficiency.

5.10.1E Other possible specialized reports include gap detection tests (say, for missing cheques or journal numbers), ageing reports (such as those that match auto inventory to sale dates), duplicate key detection (to check for duplicate invoice numbers and transactions), and sampling (random, systematic, and monetary unit).

## 5.11 CAAP AUDIT REPORT

5.11A As in the case of EA-2000, the CAAP Audit Report must document CAAP audits.

5.11B All reports should address the following minimum documentation objectives:

- to provide a trail or record of what has taken place;
- to provide background and support information for a CAA to be performed at the time of the next audit;
- to provide statistics and enable the evaluation of the Computer Assisted Audit Program (CAAP).

5.11C Minimum requirements for CAAP Audit Report documentation are as follows<sup>15</sup>:

- Index Sheet
- Computer Assisted Audit Report<sup>16</sup>

5.11D All reports should be accompanied by a standard index sheet that provides references to attached documentation and working papers. This sheet should be signed and dated by both the auditor and the audit in-charge.

<sup>15</sup> Refer to Annexe K

<sup>16</sup> Refer to Annexe K

## 5.12 BACKING UP DATA AND RETURN OF ORIGINAL MEDIA TO ASSESSEE

5.12A The backup of a file refers to the placing of a copy on a separate data medium utilizing appropriate software. The backup device can be as simple as copying the data to a diskette or as complex as a multi-volume backup using specialized software, which has compressed the data. Backup must be done regularly during the course of a CAAP audit, sometimes two times a day or more during active audit work. A final backup is required when all audit work is completed. A final back-up must be done on a media that is reliable over longer term, such as CD-Rs or DVD-Rs.

5.12B The backup process must be relatively simple to understand and use. A complex backup system will discourage regular backups which can have disastrous results if there is a data storage device malfunction. There seems to be no way to convince people to backup their data until they have experienced their first major loss.

5.12C Backed up files, that is work-in-progress files, should be tested to make sure they are readable. In case of a malfunction, the backed files could be reextracted and restored from the last valid backup point onwards before the CAAP work is recommenced.

### 5.12.1 Hardware Options for back-up of CAAP work

5.12.1A The generally available **hardware options** are:

- CD-Rs and DVD-Rs (CD-Rs most preferred, but DVD-R for large files)
- Diskette
- Separate Hard Drive – Internal or external (portable)
- USB Drives (also called pen drives) for backing up work-in-progress. It is preferable to maintain a separate USB drive for backups only.

5.12.1B Where feasible, backedup data, whether on CD, DVD, USB or external hard disk, should be stored in isolation from the CAAP laptop/desktop and CAAP working files. This will ensure that should one be lost to theft or disaster, the other is still available for use.

### 5.12.2 Software Options

5.12.2A The **software options** are:

- Copy Command
- Windows Backup Software
- WINZIP Copy with compression

5.12.2B There are many proprietary software / hardware backup methods available.<sup>17</sup>

<sup>17</sup> The team leader should be consulted on the best backup practices at the centre.

### 5.12.3 Backup Frequency

5.12.3A Regular backup of work-in-progress is extremely important and its criticality cannot be overemphasized. The magnitude and complexity of work completed since the last backup should determine the time interval within which backup should be repeated. In the project environment of an audit exercise, daily or weekly backups of the project are inappropriate. The maximum loss of data / work should be no more than one day's effort. Therefore, a backup should be taken a couple of times each day as and when significant work is done. The auditor may also want to backup work at the completion of a particularly important step or stage to ensure that in a worst-case scenario, he/she will not suffer a major setback or significant loss of work.

### 5.12.4 What to Backup

5.12.4A Backup is of two types: regular backup of **working files** to ensure minimal work loss in the event of power failure and **archiving** of data for more permanent storage.

5.12.4B The regular backup should include all active files required in the audit and files containing documentation related to the evaluation. This will normally include all files located on the hard drive being used.

5.12.4C The archive backup should be conducted in stages.

- The **first** archive is a copy of the data obtained from the client. This copy should be separate from the working copy and backup.
- The second archive is a copy of the completed data that is, the data on which CAAs have been performed, and additional work including working papers, and Audit Report.

5.12.4D **The final archive is created and maintained according to local policy.<sup>18</sup> At the minimum, final archive should be retained until any appeal is settled.**

### 5.12.5 Retention Period

5.12.5A The data retained during CAA is normally divided into a permanent file and files relating to each audit. The retention period deals with the destruction of data relating to each audit.

5.12.5B The data obtained from the assessee and created by the auditor should be retained for a period until the expiry of the objection or appeal period of a particular audit, whichever is later. The period until the expiry of the last objection or appeal period depends upon the length of the audit and the extent of the clients' objections to the adjustments.

5.12.5C As the length of time the data should be retained is variable, a simple process must be put in place to minimize the time spent in tracking the audits and the data.

<sup>18</sup> Consult the Planning Cell for policy details.

5.12.5D Once it is determined that archived / backed up CAA data is no longer required, it must be destroyed. In case of media such as CD and DVD, they must be physically destroyed. Pen drives or hard drive should be cleansed using commercial software.

#### 5.12.6 Return of Assessee Media

5.12.6A It would also be appropriate at this time to return, where applicable, the original media (such as CD or a DVD) that was received from the assessee.

#### 5.12.7 Future Recommendations to the Assessee

5.12.7A It is important to inform the assessee in writing about any recommendations with respect to its accounting systems, for instance, recommendations related to the retaining of specific records in electronic form.

# Chapter 6: Security

6A Security of equipment and the assessee's data is a major concern for CAAP officers. They should be familiar with the CBEC's Information Technology guidelines. These must be strictly adhered to. In addition, CAAP officers should observe the following best practices:

- Assessee's business records are to be treated with care and protected against any form of disclosure to 3<sup>rd</sup> parties or officers not working on the case.
- Auditors must NEVER accept original electronic records. It MUST be a copy.
- Where possible, auditors must ask the assessee to compress AND ENCRYPT the data using freely available software such as WinZIP. The auditor must remember to write down the password in his documentation.
- The auditor must provide a receipt to the assessee for the data received<sup>19</sup>
- CAAP officers are responsible for the assessee's data from the moment it is received from the assessee till it is brought to the CBEC offices and stored securely. For this reason, once data is received, the officer must return directly to the office, without making any stops on the way.
- **Assessee data must not be left unattended at any time.**
- Once in the office, assessee data must be backed up securely that is, compressed and zipped using 128 bit encryption in WinZip. The password must be recorded in either a log book or in a folder maintained for each assessee in the office.
- Once in the office, the assessee data must not be removed to an unsecured area or taken out of the office in unencrypted format.
- As soon the audit is completed and all matters settled including any objections, the original data must be returned to the assessee and a receipt obtained for the return. Any back-up copy must be securely erased. Media such as CDs and DVDs must be physically destroyed (that is, cut to pieces).
- Only the extracted reports should be retained in permanent audit files.
- It is preferable to document disposal of data and backup files recording how these were erased/destroyed/returned to the assessee and by whom.
- All computers, including desktops and laptops used in CAAP work must be preferably located in closed offices, inaccessible to unauthorized persons.

<sup>19</sup> Check Annexe I for prescribed form.

- Assessee data, when not in use, must be locked up in secure cabinets.
- It is preferred that assessee data be kept in encrypted format (WINZIP) when not in use on CAAP desktops or laptops to prevent accidental disclosure.
- Finally, it is preferable to use for CAAP work, laptops that have their hard disks encrypted. There are software products (for example, Safeguard software) or hardware products (that use encryption in combination with USB keys). In case of USB based encryption, a duplicate USB must be maintained and must be stored securely and separately in the Commissionerate. Only where the CAAP auditor has lost or misplaced the original key should the duplicate be requested for to continue with the CAAP work.

## ANNEXE A

### LEGISLATIVE PROVISIONS RELATED TO CAAP

CAAP Auditor should be familiar with the following provisions (emphasis added). Where required, the assessee should be provided with a reference to and/or a copy of these legislative provisions.

#### ELECTRONIC MAINTENANCE OF RECORDS

*(Part III of Chapter VI of CBEC's Central Excise Manual of Supplementary Instructions 2001)*

#### *Part-III : Electronic maintenance of records and preparation of returns and documents*

##### 1. Procedure

1.1 Any person may electronically maintain or generate all or any of the records, returns, invoices and other documents prescribed under the rules made under the Central Excise Act, 1944, using a computer, in electronically readable format. No specific permission from the Central Excise Department is required for this purpose. Neither is such a person required to give any intimation to the Department.

1.2 The Range Office, however, will record in either the 'Scrutiny Register' or any other record indicating the person's profile, the fact that such a person is electronically maintaining records or generating returns, invoices or other documents, using the computers.

1.3 The records can be kept and preserved on any electronic medium, such as the hard disk of computers, floppies, CDs or tapes.

1.4 The records, returns and documents should be in electronically readable format. This also means that the person who uses a computerized system to generate records/books of accounts, returns etc., must retain the electronic record, even when a hard copy is maintained.

1.5 The printouts (hard copies) of records and documents must be taken at the end of each month and kept in bound folders, separately for each type of record, return, document, etc.

1.6 Such a person should ensure that proper back-up records are also maintained and preserved, so that in the event of destruction of the originals due to accidents or natural causes, the information can be restored within a reasonable period of time. All such records, returns, invoices and other documents (both electronic and hard copies, including back-ups) should be preserved for a period of five years (counted from the first day of the financial year following the financial year to which the record, return, invoice or document pertains).

1.7 It shall be incumbent upon the person (who maintains electronic records, returns, documents etc.) to produce, on demand, the relevant records, returns or documents, in hard copy and/or in the form of tapes/ floppies/ cartridges/ compact disk or any other media in an electronically readable format (duly authenticated by the assessee), as well as documentation including policy and procedure manuals, instructions to record the flow and treatment of transactions through the accounting

system, from the stage of initiation to closure and storage, in front of the Central Excise Officers, or the Audit parties deputed by the Commissioner or the Comptroller and Auditor General of India. Such records, returns, invoices or other documents shall be produced, pertaining to such period (subject to the period of preservation) as may be requested, including the daily entries in electronic format relating to the current month for which the printouts have not been taken.

1.8 He shall also provide an account of the audit trail and inter-linkages including the source document, whether paper or electronic, and the financial accounts record layout, data dictionary and explanation for codes used and the total number of records in each field along with sample copies of documents. Whenever changes are made in the aforesaid systems adopted by the assessee, he shall inform the Central Excise Officers and submit the relevant document thereof.

1.9 In case any person is found misusing this facility or not providing access to the information, or if there are any other cogent reasons, the Assistant Commissioner or the Deputy Commissioner of Central Excise may, after recording such reasons and after taking into consideration the explanation tendered by the person regarding the discrepancies, if any, prohibit such a person from electronically maintaining or generating any records, returns, invoices or other documents using the computer and inform the immediate superior officer of this.

## PROVIDING RECORDS FOR AUDIT

*(Rule 22 (3) of Central Excise Rules 2002)*

*Rule 22. Access to registered premises*

(1) An officer empowered by the Commissioner on his regard shall have access to any premises registered under these rules for the purpose of carrying out any scrutiny, verification and check as may be necessary to safeguard the interest of revenue.

(2) Every assessee shall furnish to the officer empowered under sub-rule (1), a list in duplicate, of all the records prepared or maintained by the assessee for accounting of transactions in regard to receipt, purchase, manufacture, storage, sales or delivery of goods, including inputs and capital goods.

(3) Every assessee shall, on demand, make available to the officer empowered under sub-rule (1) or the audit party deputed by the Commissioner or the Comptroller and Auditor General of India:

(i) the records maintained or prepared by him in terms of sub-rule (2);

(ii) the cost audit report, if any, under section 233B of the Companies Act, 1956 (1 of 1956);  
and

(iii) the Income-tax audit report, if any, under section 44AB of the Income-tax Act, 1961 (43 of 1961), for the scrutiny of the officer or the audit party, as the case may be.

ANNEXE B  
OUTLINING THE COMPUTER ASSISTED AUDIT PROGRAM (CAAP)  
AUDITING IN AN ELECTRONIC ENVIRONMENT

If you use a computer to record your business transactions and activities and maintain this data electronically, you are a candidate for Computer Assisted Audit.

**What is a Computer Assisted Audit?**

Computer-assisted audits (CAAs) involve examination and analysis of business (private) records that are maintained electronically. Instead of the usual examination of paper records, the audit involves examination of electronic records. All or a part of an audit could be completed using electronic records.

Under the Computer Assisted Audit Program (CAAP), the Excise Department has auditors specially trained in CAA. They are experienced auditors who have received additional training in auditing of electronic records. They use commercial and custom software on secure departmental computers for this purpose.

In many circles, CAA is also referred to as CAAT or Computer Assisted Audit Techniques.

**What are the benefits of CAA?**

The most important benefit is that it saves time, both for the assessee as well as for the CAAP auditor. Computer assisted audits take much less time as compared to manual audits. Both assessee staff and CAAP auditors spend less time identifying, locating, retrieving, examining and restoring paper documents. Most of the records are made available to the auditor in an electronic format. The auditor examines them using a secure departmental computer.

An electronic audit reduces the amount of paper normally needed, produced or photo-copied during an audit.

It is more efficient as more efficient techniques for reviewing taxpayer information are used in CAAs.

CAAP Auditors spend less time at assessee premises.

**Who Authorizes a CAA?**

Part III of Chapter VI of CBEC's Central Excise Manual of Supplementary Instructions 2001 provides, among others that:

- 1.7 It shall be incumbent upon the person (who maintains electronic records, returns, documents etc.) to produce, on demand, the relevant records, returns or documents, in hard copy and/or in the form of tapes or floppies or cartridges or compact disk or any other media in an electronically readable format (duly authenticated by the assessee), as well as documentation including policy and procedure manuals, instructions to record the flow and treatment of transactions through accounting system, from the stage of initiation to closure and storage in front of the Central Excise Officers, or the Audit parties deputed by the Commissioner or the Comptroller and Auditor General of India. Such records, returns, invoices or other documents

will be produced pertaining to such periods (subject to the period of preservation) as may be requested including the daily entries in electronic format relating to the current month for which the printouts have not been taken.

- 1.8 He shall also provide account of the audit trail and inter-linkages including the source document, whether paper or electronic, and the financial accounts record layout, data dictionary and explanation for codes used and total number of records in each field along with sample copies of documents. Whenever changes are made in the aforesaid systems adopted by the assessee, he shall inform the Central Excise Officers and submit the relevant document.

### How does CAA Work?

Computer assisted audit works by analysing a copy of your electronically stored records that you provide to the CAAP Auditor on a disk or CD. Your original records are not 'touched' or altered in any way. The auditor transfers these copied records from the disk or the CD to a secure departmental computer.

Next, the auditor analyses and verifies your records using a combination of commercial and custom software. Your original records are not altered in any manner during the CAA process. In fact, the commercial software used by the CAAP auditor is designed specifically to never alter any assessee record.

### What Happens during a CAA?

A CAA starts with a meeting between the CAAP auditor and your accounting/systems staff. During the meeting, the CAAP auditor requests for information to determine the feasibility of a CAA. The questions are part of a CAA feasibility survey and include information about:

- Hardware and peripherals
- Operating system used by your computer system
- Accounting software you use
- Accounting information such as chart of accounts
- Details of information in your electronic records
- Backup and data retention methods you use
- Data export options supported by your system
- Conversion of your data to a format readable by departmental computers

The CAAP auditor identifies specific computer files and records he/she requires for the audit and asks you to provide a copy of those records on a disk or a CD. He might also have to ask you to convert the data to a format that is non-proprietary and readable by departmental computers. If you wish, you may make a second copy of the same records you provide to the CAAP Auditor, for your reference.

The auditor would next copy these records to a secure departmental computer and analyse/verify them using a combination of commercial and custom software. Your data is not altered during the examination. Rather, the auditor reviews these, validates that all the records are included in the data, summarises them, and extracts a copies of selected records of interest to a number of reports.

Once the audit is complete, your records and reports are removed from the computer and stored temporarily on disks or CDs, until the audit is finalised. If there are no appeals or objections, the original data you provided is securely erased. Only the audit reports are stored in our files.

### Are My Records Safe?

Your records are handled with extreme care and are encrypted during transfer and storage. They are accessible only to the authorized Excise officers. Upon completion of an audit or upon conclusion of any appeal or judicial review, the records you provided are securely erased and the CDs destroyed. Should you wish to have your disk or CD returned back to you, please advise the CAAP auditor accordingly.

### Is There a Risk to My Computer System?

There is no risk to your computer or your electronic records. We just ask you to make a copy of your records. Under no circumstance will the CAAP auditor ever operate your computer system.

### Where can I Get more Information about CAAP?

Further information on Computer Assisted Audit Program is available from your local Excise Commissionerate or from the CBEC website.

ANNEXE C  
 SURVEY OF COMPUTER SYSTEMS AND ACCOUNTING SYSTEMS USED  
 BY THE ASSESSEE

Assessee Identification

1. Name	
2. Location/Division/Factory	
3. CX Commissionerate/Division	
4. Identification #	
a. ECC #	
b. Other – if applicable	
5. Person Interviewed, Ph. #:	
a. Systems contact person:	
b. Accounting contact person	
c. Other contact person	
6. Date of meeting:	

Hardware and Peripherals

1. Computer Make and Model	
2. Computer Type (PC/Mini/Mainframe)	
3. Operating System :	
4. Peripherals: (name, capacity, # of units)	
a. Disk – Internal	
b. Disk – External	
c. Tape Drive	
d. CD/DVD recorders	
e. Back-up storage – Tape/Disk/CD/DVD	
f. Other (list all)	
5. Are user manuals available (if required?)	

Operating System

1. Name and version/release	
2. Are user manuals available (if required?)	

## Accounting Software

1. Name and version# and Release#	
2. Developer Name and Website	
3. Database System used (if not integrated with accounting software)	
4. Modules (A/R, A/P, Inventory, ...)	
a. General Ledger	
b. Accounts Receivable	
c. Accounts Payable	
d. Fixed Assets	
e. Inventory	
f. Sales	
g. Customer	
h. Vendor	
i. Payroll	
j. Purchase Order, Purchase Analysis	
k. Others	
l. Add on software	
m. If necessary, include other comments:	
5. Are user manuals available, if required?	

## Accounting Information

1. Chart of Accounts: obtain a copy	
2. Invoice and purchase order: obtain a copy each	
3. Coding (tax codes, product codes) details: obtain information	

## Backup and Data Retention

1. What is backed up?	
a. Sales, purchases, etc.	
b. Detailed records or summaries?	
2. Period/Information available 'live' on the system	
3. Data back up practice (how often, where)	

## Data Export Options

1. Export format: (see Help file)	
a. ASCII or EBCDIC 'flat' file	
b. DBF or CSV	
c. MSEXcel	
d. MSAccess	
e. XML	
f. Print report captured to file (This is to be accepted if everything else is ruled out.)	
g. Other (explain how you propose to import data in IDEA)	
2. Export media:	
a. CD ROM	
b. DVD	
c. Diskette	
d. USB Transfer	
e. Connect Laptop to Assessee computer using:	
i. Ethernet network Cable	
ii. USB network cable	
iii. Other (explain)	

## HELP FILE (FOR COMPLETING THE SURVEY)

### *General*

- A. *The information obtained in this document is useful for the audit currently underway as well as for future audits. Often, where there are no major systems or software changes, the subsequent audits can be completed faster and in a way that is less disruptive for the assessees if this information is obtained and recorded with care.*
- B. *Wherever necessary, attach additional details in a separate paper or schedule.*
- C. *If you are not sure about anything in here, ask questions of other audit CAAP officers.*

### *Assessee Identification*

- A. *Completion of this section is mandatory.*
- B. *Please be sure to obtain contact names and numbers for both Systems and Accounting areas. You are likely to have questions that could be answered over the phone, saving you a trip to assessee offices.*

### *Hardware and Peripherals*

- A. *Try to note as much information as you can here.*
- B. *For PCs & clones, it is not necessary to obtain exact manufacturer name, provided its operating system is Windows 95 or later.*
- C. *If it is other than Windows 95 or later, like DOS, UNIX or Macintosh, you must also try to obtain manufacturer and operating system details.*
- D. *For all mainframe and mini-computers, hardware manufacturer, model number and operating systems MUST be noted. Similarly, model numbers and types of peripherals like disk and tape drives must be noted for all mainframe and mini-computers.*
- E. *For most PCs, it is not necessary to obtain the manufacturer, model numbers for peripherals such as disk drives. But you must indicate if these are internal (inside the main computer box) or external. Tape drives for PCs are not standardized and you must note the make, model number AND software used to write to PC tape drives.*
- F. *It is a good idea to ask if manuals are available for computers, operating systems and accounting software.*

### *Operating System*

- A. *Always note the operating system and version details, such as Windows 2000 Professional.*
- B. *For mainframe and mini-computers, there is often an operating system name along with a version number and 'release' number such as IBM System 390 Mainframe Computer, running on Z/VSE Version 3 Release 1 operating system.*
- C. *If possible, ask for the website of the operating system developer, especially if it is UNIX – as there are*

many flavours of Unix. You can go to the website to obtain information about common commands such as 'copy', 'directory'. etc.

D. Again, do ask if manuals are available—you might need them later on!

### *Accounting Software*

- A. Most PC accounting systems have name and version number (version 3.2 or version 2002) but often high-end ERPs also have a version number AND a release number, e.g. SAP R/3 version 2.1
- B. High-end software such as SAP could also have additional 'database' software that looks after data recording and retention. e.g. SAP could have DB2 as the underlying software.
- C. Most accounting software has separate modules, as per list above.
- D. Some accounting packages have additional utilities, report writing software or audit modules. For SAP, there is AIS (Audit Information System) for auditing/extracting reports as well as DART (Data Archiving Retention Tool). These are very useful in obtaining audit data from such ERP systems. If not sure, just ask what utility or software is used for creating standard or custom reports.
- E. There are several report-writing software packages for PC based software, such as Crystal Reports, SQL and the like. If the assessee is using such report-writing software to create standard and customs reports, he could use the same to extract the transactions you want to audit.
- F. It is very important to obtain the website of the accounting system developer. The website often provides information on how to read old data or locate certain files, etc.. Some developers also offer trial versions of software and/or user guides—a great help if assessee personnel are not able to help you.
- G. Again, don't forget the manuals!

### *Accounting Information*

- A. This section gathers information about the accounting system, such as the chart of accounts, how sales invoices are numbered, how duties and service taxes are handled by the system.
- B. It is critical that you obtain a list of 'chart of accounts'.

*This is a structured set or listing of financial accounts in the general ledger, organized by account numbers. For example, 1000 series could be account numbers for Assets; 2000 - Liabilities; 3000 - Net Position; 4000 - Budget Resources & Status; 5000 -Revenues & Financing Sources; 6000 - Expenses; 7000 - Gains and Losses; and 9000 - Memos.*

*Obtaining a full list of such account numbers and descriptions helps you understand the accounting system and transactions.*

- C. Sometimes, the accounting system also uses codes for various things. For example, there might be tax codes, product codes, salesman codes, territory codes, etc. It is important to get these code tables.
- D. There are often charts, diagrams or other documents which reveal how various modules interact. For example, such a document might explain that each shipment, identified by a shipping number, is used to create an invoice. Each invoice is then posted to accounts receivable. Daily totals of sales invoices are posted to revenues in the General Ledger. If such as document is available it might be a good idea to get a copy.

### *Backup and Data Retention*

- A. *It is a good practice to backup accounting information on a regular basis. This helps the businesses recover information if there is a systems crash or failure. If an assessee does not have any backup routine or system, it should be strongly recommended that one be put in place so that the assessee is able to meet the legislative obligations of keeping records.*
- B. *Larger assesseees would tend to have very formal procedures in place, including 'offsite' backups to continue operations in case of disasters such as a fire or a flood.*
- C. *Backup is also required at the end of a fiscal year to close off a year for accounting purposes. In this case, the 'old' transactions are 'archived' or backed up for future reference by internal and external auditors.*
- D. *It is necessary to understand the backup procedures so that you can understand where the data you want to audit is stored.*

### *Data Export Options*

*It is very important that the data you receive from the assesseees meets the following requirements:*

- A. *Readable by IDEA software and*
- B. *Readable by computers available to the auditor*
- C. *Covers the period under audit*
- D. *Covers the subject or issue you want to audit such as sales invoices, jobbed goods, or purchases*
- E. *If there are 'master files' and 'detail records', you must either:*
  - a. *Ask the assessee to link or join master and detail files to create complete transaction file(s) (preferred option), or*
  - b. *Obtain 'master files' and 'detail records', and link/join them yourself to create complete transaction files*
- F. *Coding tables must be obtained for all codes (e.g. tax code 1 = dutiable. 2 = export/exempt, etc.)*
- G. *In case of ASCII or EBCDIC, you must also obtain a record layout.*
- H. *In all cases, you must ask for a record count (number of transactions) for each file you receive, as well as totals for some key fields (such as Rupee amounts). These become your 'validation' numbers as you analyse transactions.*
- I. *You must also try to obtain data on a medium that can be read by computers available to you that is, laptop or desktops available at the Excise Commissionerate.*

ANNEXE D  
SAMPLE LETTER TO THE ASSESSEE AND REQUEST TO FILL OUT  
THE CAAP SURVEY

Dear Sir/Madam,

Re: Computer Assisted Audit of XYZ Limited.

This is to inform you that an audit of XYZ Limited is scheduled for the purpose of verifying compliance with the Central Excise Act. It is proposed to initiate the audit on (insert date).

In order to expedite the audit process, we propose to undertake this audit using Computer Assisted Audit (CAA) Techniques to examine those records that are kept in electronic format.

Use of CAA techniques in an audit saves time, both for the assessee and for the Commissionerate. It significantly reduces auditor requests for paper records. Please find attached a brochure explaining our CAA program. We would be pleased to answer any questions you might have.

In order to facilitate the CAA and to reduce the time we spend at your premises, we would like to obtain information about your accounting and computer systems as well as the names of people we can contact to obtain additional information and assistance about your computer and accounting systems. Attached herewith you will find '*Survey of Computer Installation and Accounting Systems used by the Assessee*' and '*CAA Assistance*' forms.' We would appreciate it if you could complete these forms and return them to the undersigned by (insert date). Normally, the information requested in the above form is available through your computer systems department.

Should you have questions, please feel free to contact the undersigned.

Name of CAAP officer

Address

Commissionerate

Contact #.

ANNEXE E  
CAA ASSISTANCE FORM

Assessee Name:

Commissionerate:

1. Contact Persons:

- o Computer Systems and hardware: \_\_\_\_\_
- o Accounting Systems and software: \_\_\_\_\_
- o Accounting Data required for audit: \_\_\_\_\_

(This person could be either in the computer department, or an outside consultant, or it could be somebody else within the company who has the knowledge required to assist the Excise Auditor)

Work area:

\_\_\_\_\_

(Identify the specific area where an auditor could work with his/her laptop with access to electrical outlets for laptop and peripheral equipment.)

2. Use of Assessee Equipment

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(Assessee equipment such as printer, scanner or CD burners that could be required during an audit to extract and transfer electronic records from the assessee's system to the auditor's laptop.)

3. Signature of Assessee:

Above information provided by:

**Assessee:**

Officer:

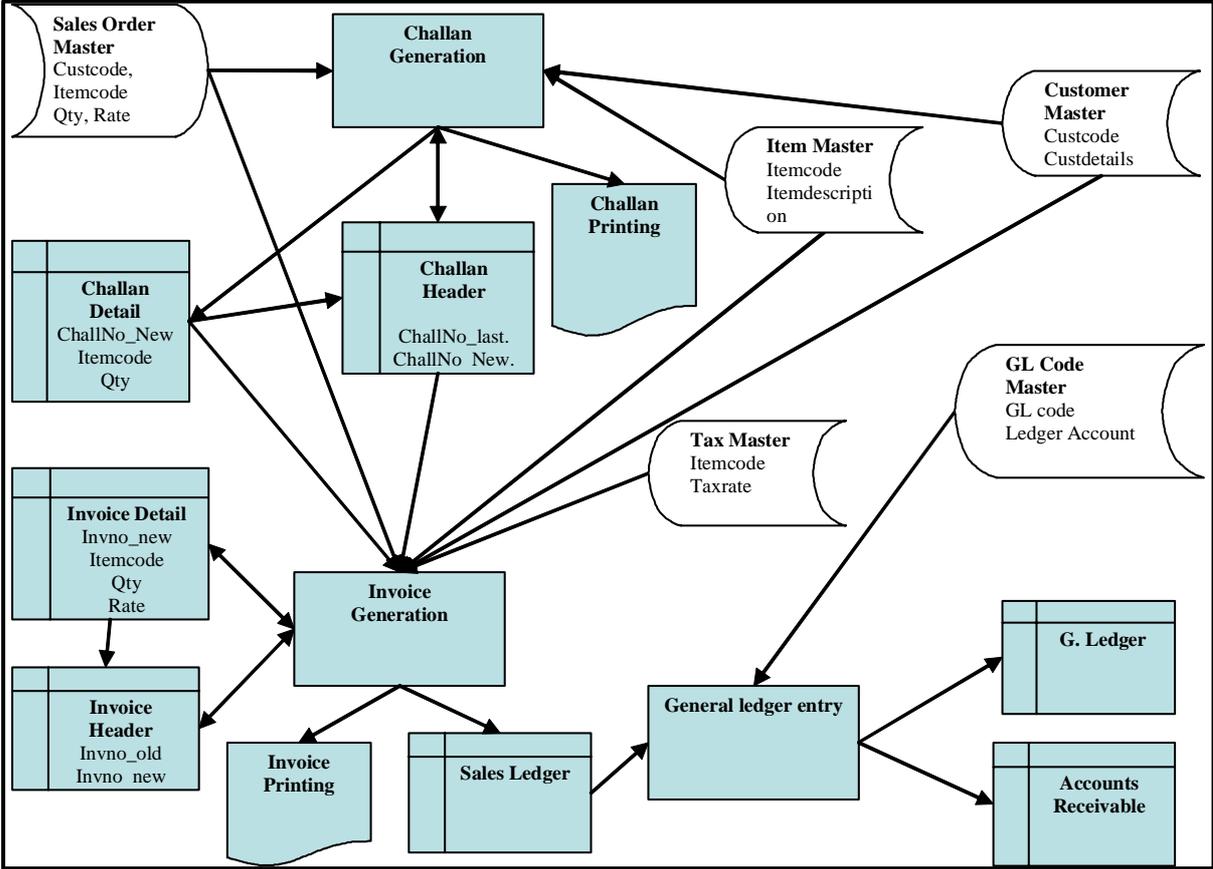
Signature:.

Date:

Normally, such an assistance form is required in large organizations where there are distinct computer systems and accounting departments.

ANNEXE F  
 SAMPLES OF DATA FLOW DIAGRAMS / SYSTEM FLOW CHARTS

Sample 1





ANNEXE G  
ASSEESSEE ACCOUNTING SYSTEMS REVIEW

Accounting System – Major Modules:

Module	Linked to	Linked by
<i>Ex. Purchase</i>	<i>GL</i>	<i>PO number</i>
	<i>Inventory</i>	<i>PO number</i>

Accounting System – Minor Modules:

Module	Linked to	Linked by
<i>Shipping</i>	<i>Sales/Invoice</i>	<i>Packing Slip number</i>
<i>Receiving</i>	<i>Purchase/A/C Payable</i>	<i>Receiving memo number</i>

Data Flow Diagrams / System Flow Charts  
(refer to example in Annexe F.)

List of Data Flow Diagrams or System Flow Charts obtained and observations about linkages between systems – including confirmation of linkage information above.	
Diagram/Chart name	Description and observations
1.	
2.	

Analysis of Chart of Accounts

Obtain a copy of chart of accounts and identify important accounts and relationships.	
Account Name or Group	Description and observations
<i>e.g. Organization of accounts</i>	<i>Assets = 1000 series</i> <i>Liabilities = 2000 series</i> <i>Revenues = ..... series</i> <i>Expenses = ..... series</i> <i>.....</i>
Cenvat	Account number
Excise Duties	Account number

Analysis of Reports Generated

Review copies of important reports generated by the system (attach copies if available)	
Report	Description (subsystem that creates it, frequency of production of the report, and what they are used for)
Cenvat claim	Monthly list of purchase invoices and cenvat credit amounts

### Analysis of Record/File Layouts

Obtain list of data files that are retained by the system and if possible, obtain file layout (attach copies if available)	
File name	Description (systems that create and/or use the data file, how often created or retained, etc.)

### Summary of Observations

Summarize important observations and conclusions from the assessee systems review.
<i>e.g.</i> <ul style="list-style-type: none"><li>• <i>Sales detail file does not contain client details other than client number. Match and merge would be required to reconstitute sales data.</i></li><li>• ...</li></ul>
<ol style="list-style-type: none"><li>1.</li><li>2.</li><li>3.</li></ol>

ANNEXE H  
COMPUTER ASSISTED AUDIT FEASIBILITY EVALUATION CHECKLIST

<i>Issue</i>	<i>Assessee details</i>	<i>CAA Feasible? (Y/N) (provide details if No)</i>
<p><b>Period of Computerization:</b> Whether assessee has maintained computerized records during the period of proposed Audit.</p>		
<p><b>Nature of Computer System:</b> Information available from the survey.</p>		
<p><b>Extent of Computerization and Level of integration:</b> Identify the modules that are computerized:</p>		
<p><b>State of Documentation:</b> Availability of systems documentation and process flow charts improves the feasibility of CAAP.</p> <ul style="list-style-type: none"> <li>- Systems documentation</li> <li>- Data/process flow diagrams</li> <li>- Chart of accounts</li> <li>- Coding charts/tables</li> <li>- Data dictionaries/record layouts</li> <li>- Backup/retention policies</li> </ul>		
<p><b>Data Transfer Mechanism:</b> Availability of a mechanism to copy electronic records (data) from system: (test data transfer)</p> <ul style="list-style-type: none"> <li>- CD/DVD writers</li> <li>- USB ports for USB devices</li> <li>- Diskette drives</li> </ul>		
<p><b>Data Format:</b> Can the system copy/export electronic records in a format readable by IDEA software? If not, explore the option of converting to one of these formats.</p> <ul style="list-style-type: none"> <li>- ASCII text</li> </ul>		

<ul style="list-style-type: none"> <li>- Print (text)</li> <li>- Comma Separated Values (CSV) or Database format (DBF)</li> <li>- Microsoft Excel</li> <li>- Microsoft Access</li> </ul>		
<p><b>Create a test file</b> Ask assessee to create test file(s) containing a few records each. List types of transactions selected for the assessee to create test file(s).</p>		
<p><b>Select Data Format (and obtain records layout):</b> From the earlier analysis on assessee system capabilities, advise the assessee to create the test file(s) on its system and to provide you with a record layout.</p>		
<p><b>Test Transfer Mechanism</b> Once the assessee has created the test file(s) on its system, proceed to transfer them to the auditor's system, using appropriate mechanism such as A CD, Diskette, USB, etc.</p>		
<p><b>Verify the Test File:</b> The final step in the CAAFE is to make the test file(s) you received are usable. Transfer them to the auditor's laptop/computer and then open them using the file browser (e.g. WordPad) the IDEA software. If IDEA is able to read them using the record layout from the assessee, then you have successfully completed the feasibility.</p>		

## ANNEXE I COMPUTER ASSISTED AUDIT OBJECTIVES

(Note: The CAA Objectives must be based on the EA-2000 Audit Plan and support audit objectives therein. Hence, the first section in the CAA plan outlines the audit plan from EA-2000. Only high level 'issues' should be identified here).

	EA-2000 Audit Plan:
	<i>e.g.: Review all MODVAT credits over Rs. 10,000, or Examine all sales to related assessees (name= XYZ), etc.</i>
1	
2	
3	
4	
5	

	CAA - Objectives: <i>Mandatory Steps</i>	Completed Y/N or WP number
	These steps apply to <u>each set of electronic records</u> , e.g. Sales, Purchases, etc.	
	(explain if not applicable)	
1	Verify File Layout	
2	Verify File Integrity, including invalid data for follow-up	
3	Balance – Number of transactions (keep count)	
4	Balance – Key (Amount) Fields – as applicable: <ul style="list-style-type: none"> <li>• Equal to 0 (zero) for Trial balance</li> <li>• To Financial statements</li> <li>• To Tax returns</li> </ul>	
5	'Data Review': <ul style="list-style-type: none"> <li>• Identify records, fields needed</li> <li>• Identify if records that either pertain to other assessees or that pertain to this assessee but are not relevant to the audit have been included.</li> <li>• Identify if modifications are required</li> <li>• Identify if records need to be joined – e.g. sales master and sales details.</li> </ul>	
6	Modify data as above	

7	Perform 'join' as necessary and document the resulting files (remember to count records!)	
8	Other steps: <ul style="list-style-type: none"> <li>• Other steps as necessary to 'prepare' data before reports or extractions are performed.</li> </ul>	

	CAA - Objectives: <i>for EA-2000 Plan</i>	Completed Y/N or WP number
	Plan for each of the EA-2000 Plan items listed earlier. <i>Example:</i> <ul style="list-style-type: none"> <li>• Extract a report of all sales amounts (Sal_Amt) &gt;10,000, or</li> <li>• Extract a report of all sales where customer name (Cus_Name) contains a string 'XYZ'</li> </ul>	
	(explain if not applicable)	
1		
2		
3		
4		
5		

	CAA - Objectives: <i>for unusual items</i>	Completed Y/N or WP number
	Plan for each of the 'unusual items' observed during the CAA. Where necessary, discuss with others in the audit party. <i>Example:</i> <ul style="list-style-type: none"> <li>• Sales AND Purchases from same company: Match lists - Vendor names (Vend_Nam) to Customer name (Cus_Nam) to find common names. Then extract all purchases AND sales to each vendor/customer</li> <li>• Large credits in Sales Journals near year-end: Extract a report of all negative sales amounts in December. Sal-Amt&lt;0 AND Date &gt;=20051201.</li> </ul>	
	(explain if not applicable)	
1		
2		
3		
4		
5		

(Where necessary, the CAA Objectives should be approved by the Officer in Charge of the Audit.)

\_\_\_\_\_  
(Approved by: Name:)

\_\_\_\_\_  
(Date)



<b>Acknowledgement for Receipt</b>	
Assessee:	<i>Commissionerate</i>
Authorized Officer:	Excise Officer
Signature:  I acknowledge that the above noted electronic records <u>are copies</u> and we continue to maintain original records as per Central Excise Legislation	Signature:  I acknowledge the receipt of above noted copies of electronic records. Where return is not requested, these records would be securely erased and destroyed once they are no longer required.
Date:	Date:
Request for return: Yes/No	

<b>Acknowledgement for Return of Records by Excise</b> (to be completed where copies of records are provided on a media such as a CD and return of the same is requested)	
Assessee:	<i>Commissionerate</i>
Officer:	Excise Officer
Signature:  I acknowledge that the above noted electronic records <u>have been returned</u> to me. This does not constitute a permission to destroy the original records. We continue to maintain original records per Central Excise Legislation.	Signature:
Date:	Date

## ANNEXE K CAA REPORT

### INDEX

1. Index:Assessee Identification:	Page number
2. CAAP Desk Review:	
a. CAAP related information about the assessee available in the Commissionerate, e.g. survey results, earlier CAAP audits, etc.	
b. Overall CAAP objective as per EA-2000 Audit Plan, if available, and specific compliance issues for the audit of the assessee.	
c. Preliminary CAAP audit plan (general narrative)	
3. Letter to the assessee, including request to fill out CAAP survey (if used)	
4. Assessee Systems Environment: as per survey or discussion with the Assessee Personnel:	
a. CAAP Survey – Annexe C	
5. CAAP Protocol – attach completed form where used,	
6. Review of Assessee Systems:	
a. Assessee Accounting Systems Review – Annexe G	
7. Computer Assisted Audit Feasibility Evaluation:	
a. CAAFE Report including conclusions.	
8. Data Transfer and Review:	
a. Receipt provided to the Assessee	
b. Data files requested, received, and size thereof	
c. Records in each file to be balanced	
d. list of file errors such as invalid data, if any. Are replacement files required?	
e. Prepare file for audit	
9. CAAP Audit Plan:	
10. CAATs: Description of reports generated. All of the following should be retained in electronic format until all audit and assessee disagreements, if any, are resolved. Electronic copies of IDEA program/ scripts and reports generated should be maintained for future audit needs.	
a. File conversion, including file names, records in and out information.	
b. File manipulation, including records in and out information.	
c. Reports generated, including specific IDEA application, including logic used.	
11. Media control and return of media to assessee.	
12. Future recommendations to the assessee.	

**Assessee Identification**

1. Name	
2. Location/Division/Factory	
3. CX Commissionerate/Division	
4. Identification number	
a. PAN number	
b. Other – if applicable	
5. Person Interviewed, Phone number:	
a. Systems contact person:	
b. Accounting contact person	
c. Other contact person	
6. Date of meeting:	

**1. Desk Review**

**a. CAAP Related Information Available in the Commissionerate:**

Indicate important information and issues from prior CAAP Audit, if any. If necessary, attach copies or additional details.

**b. Overall CAAP objective as per EA-2000 Audit Plan, if available:**

List overall CAAP objectives based on the EA-2000 Audit Plan. (list EA-2000 objectives that could be met using CAAP)

**c. Preliminary CAAP audit plan:**

Please identify what you expect to achieve/confirm/verify using CAAP

2. Letter to Assessee:

Indicate if a letter was sent to assessee:

Yes  Attach a copy and the response from the assessee

No  Explain

Reason why letter was not sent to the assessee

3. Assessee Systems Description:

a. Indicate if CAAP survey was completed.

Yes  Attach a copy of the survey.

No  Explain

Outline significant observations from the survey or through discussions with assessee personnel.

4. Review of Assessee Accounting Systems:

a. Indicate if Assessee Systems review was completed.

Yes  Attach a copy of the review.

No  Explain

Observations: Identify important observations that could have an impact on compliance, CAAP or EA-2000 audit work, including assessee internal controls and their reliability, etc.

5. Computer Assisted Audit Feasibility Evaluation:

a. Indicate if CAAFE was completed.

Yes  Attach a copy of the CAAFE.

No  Explain

6. Go/No Go Decision:

Conclusions: Indicate if the decision was taken in favour of proceeding with CAAP. In case it was determined that CAAP is not feasible, explain your decision.
Please indicate steps you have taken to ensure the CAAP could be used during the next time. <i>e.g.: Assessee was asked to and has agreed to;</i> <ul style="list-style-type: none"><li>• <i>Retain electronic records from now onwards (include letter to assessee and response thereto).</i></li><li>• <i>Maintain adequate documentation, including record layout and explanation of codes used.</i></li><li>• <i>Other as applicable</i></li></ul>

7. CAAP objectives as per EA-2000 Audit Plan

a. Indicate if CAAP objectives were established per information gathered so far and the EA-2000 Audit Plans:

Yes  Attach a copy.

No  Explain

Explanation for cases where CAAP objectives were not prepared

8. Data Transfer and Review:

a. Indicate if a receipt provided to the assessee for data

Yes  Attach a copy.

No  Explain

b. Data files requested, received, and size

<i>Description of file requested:</i>	<i>Filename (explain if not received)</i>	<i>Size</i>	<i>Comments, if any</i>
<i>e.g. Sales for April 06 to March 07</i>	<i>Sal0607.csv</i>	<i>13.5 MB</i>	<i>Sales information excl. rebates</i>

c. Number of records in each file (to be balanced)

<i>Filename</i>	<i>Number of records</i>	<i>Balance totals</i>	<i>Balanced to (explain if different)</i>
<i>e.g. Sal0607.csv</i>	<i>62, 386</i>	<i>Sales Rs. 39,56,432 (excl monthly totals – see below)</i>	<i>Sales journal = Rs. 39,72,539. Difference due to GJ adj. verified manually.</i>

d. List of file errors such as invalid data, if any. Are replacement files required?

<i>Filename</i>	<i>Errors</i>	<i>Was existing file corrected or new file received?</i>	<i>Comments</i>
<i>e.g. Sal0607.csv</i>	<i>Monthly totals (12)</i>	<i>Manually deleted</i>	

9. Data Preparation:

Provide comments on additional work required to prepare file for audit.

<p>Explanation of additional work performed:  <i>e.g. Sal0607.csv was match/merged cusmast (customer master) to create sales file with customer name and address information.          (add supplementary documents where necessary to explain), or          File format was changed from print file (text) to CSV.</i></p>
<p><u>Filename:</u></p>
<p><u>Filename:</u></p>
<p><u>Filename:</u></p>

10. CAATs (Computer Assisted Audit Techniques) reports generated:

- a. File conversion, including file names, records in and out information.

Please provide a short narrative of file conversions.

- b. File manipulation, including records in and out information.

Please provide a narrative on file manipulations, such as joins, match/merge, etc.

- c. Reports generated, include specific IDEA application, including logic used.

Provide a detailed description, including logic used in extracting reports. Include names of electronic reports from IDEA and identify how/where they are stored.

11. CAAP Report: (This report)

Provide highlights of CAAP results, what was verified and what errors/problems were discovered by CAAP.

12. Back-up and return of original media to assessee:

- a. Indicate if CAAP data was backed up.

Yes  Provide details below.

No  Explain

<i>Backup Filename</i>	<i>Description</i>

b. Indicate if assessee data was returned on the media it was provided in.

Yes  Attach a copy of the receipt.

No  Explain

c. Indicate if any specific recommendations were made to the assessee in order to improve future CAAP audit.

Yes  Attach a copy of the letter sent to the assessee.

No  Explain

Summary of recommendations: e.g. Back up data at the end of fiscal period, retain monthly sales details, etc.

CAAP Report prepared by:

\_\_\_\_\_

Name

\_\_\_\_\_

Date

CAAP Report approved by:

\_\_\_\_\_

Name

\_\_\_\_\_

Date

ANNEXE L  
SAMPLES OF RECORD/FILE LAYOUTS

Sample 1

Date of last update: 03/16/04					
<i>Field #</i>	<i>Field Name</i>	<i>Type</i>	<i>Width</i>	<i>Dec</i>	<i>Description</i>
1	SER_NO	Character	6		GRN serial No.
2	SER_DT	Date	8		GRN Date
3	GE_NO	Numeric	5		Gate Entry No 1
4	GE_NO1	Numeric	5		Gate Entry No 2
5	GE_DT	Date	8		Gate Entry Date
6	OLD_CODE	Numeric	5		Assessee's old material code
7	NEW_CODE	Numeric	5		Assessee's new material code
8	CUST_ID	Character	5		Customer code
9	SCHEDULE	Numeric	7	4	Delivery Schedule
10	CUST_ID1	Character	5		Customer code 2
11	NAME	Character	35		Customer Name
12	NAME1	Character	35		Customer name 2
13	SL_NO	Numeric	2		Entry No in GRN
14	OLD_MCODE	Character	9		Final Prod code old
15	NEW_MCODE	Character	9		Final prod code new
16	SR_NO	Numeric	3		
17	MCODE	Character	9		
18	UM	Character	3		Unit of quantity
19	DESC	Character	45		Description of Material recd
20	CONTCODE	Character	8		
21	CONTUM	Character	3		
22	CONTNOS	Numeric	7		
23	CONTSENT	Numeric	7		
24	PKD_CD	Character	2		Package code
25	QTY_ADV	Numeric	10	3	Quantity adviced
26	QTY_RCD	Numeric	10	3	Quantity received
27	QTY_ACC	Numeric	10	3	Quantity Accepted

Cont. on next page

Sample 1 (cont.)

<i>Field #</i>	<i>Field Name</i>	<i>Type</i>	<i>Width</i>	<i>Dec</i>	<i>Description</i>
28	QTY_REJ	Numeric	10	3	Quantity Rejected
29	QTY_UINS	Numeric	10	3	Quantity under Inspection
30	SRA_QTY	Numeric	10	3	
31	MAT_SENT	Numeric	10	3	Quantity sent back
32	REOFF_QTY	Numeric	10	3	Quantity reoffered for Inspection
33	REWORK_QTY	Numeric	10	3	Quantity for rework
34	DEF_CD	Character	2		
35	SRA_FLAG	Logical	1		
36	REMARKS	Character	125		
37	TEM_SER	Numeric	6		
38	MCODE1	Character	8		
39	SER_NO1	Numeric	6		
40	SC_NO	Numeric	5		
41	SCH_NO	Character	18		
42	PO_NO	Character	23		
43	OLD_PO	Character	23		
44	VCH_FLAG	Character	1		
45	RMGP_NO	Character	5		
46	ORD_TYPE	Character	1		
47	LOAN_MAT	Character	1		
48	ENTRY_DATE	Date	8		
49	ENTRY_TIME	Character	5		
50	USER_NAME	Character	35		
51	MANYTOONE	Character	1		
52	RATE	Numeric	13	3	
53	STD_RATE	Numeric	13	2	
54	NEWFIELD	Character	10		
55	DOCNO_CD	Character	2		
56	ACC_RATING	Character	1		
Total (record length)			639		
Record length per Assessee			640		
Difference to follow up			1		

## Sample 2

Date of last update: 03/16/04					
<i>Field</i>	<i>Field Name</i>	<i>Type</i>	<i>Width</i>	<i>Dec</i>	<i>Description</i>
1	DEPT_CODE	Character	2		Section code
2	SER_NO	Character	6		GRN No
3	SER_DT	Date	8		GRN date
4	R_TIME	Character	5		Received time
5	GE_NO	Numeric	5		Gate entry no
6	GE_DT	Date	8		Gate entry date
7	OLD_CODE	Numeric	5		
8	NEW_CODE	Numeric	5		
9	CUST_ID	Character	5		
10	SCHEDULE	Numeric	7	4	
11	PO_NO	Character	23		Purchase Order No.
12	OLD_PO	Character	23		Old PO No.
13	PO_DT	Date	8		PO Date
14	SCH_NO	Character	4		Schedule No
15	SCH_DT	Date	8		Schedule date
16	CH_NO	Character	8		challan no
17	CH_DT	Date	8		challan date
18	INV_NO	Character	8		Sender's Invoice no
19	INV_DT	Date	8		Sender's Invoice date
20	PSER_NO	Character	6		Packing slip No
21	PSER_DT	Date	8		Packing slip date
22	GFB_NO	Character	8		Foreign B/E No
23	GFB_DT	Date	8		Foreign B/E date
24	STB_NO	Character	8		Stock Tr. no
25	STB_DT	Date	8		Stock Tr. date
26	GR_NO	Character	8		
27	GR_DT	Date	8		
28	RMGP_NO	Character	5		
29	RMGP_DT	Date	8		
30	CARRIER	Character	15		
31	NO_PKT	Numeric	4		
32	ORD_TYPE	Character	1		

Cont. on next page

Sample 2 (cont.)

<i>Field #</i>	<i>Field Name</i>	<i>Type</i>	<i>Width</i>	<i>Dec</i>	<i>Description</i>
33	CHARGE	Character	1		
34	RE_OFFER	Character	1		
35	LAB_CHG	Numeric	8	2	
36	MAT_CHG	Numeric	9	2	
37	OTH_CHG	Numeric	8	2	
38	ITEMS	Numeric	2		
39	RCR_NO	Numeric	4		
40	COST_HD	Character	4		
41	INS_DT	Date	8		
42	STK_DT	Date	8		
43	VCH_FLAG	Logical	1		
44	PAY_FLAG	Logical	1		
45	EX_FLAG	Character	1		
46	VCHNO	Numeric	5		
47	VCHDT	Date	8		
48	VCH_TYPE	Character	2		
49	BVCH_NO	Numeric	6		
50	BVCH_DT	Date	8		
51	CHQ_NO	Character	10		
52	PRN_FLAG	Numeric	3		
53	DEV_DIS	Numeric	8	2	
54	STATUS	Numeric	1		
55	GROSS_WT	Numeric	8		
56	NO_SH	Numeric	4		
57	TEM_SER	Numeric	6		
58	SC_NO	Character	22		
59	FLAG	Character	1		
60	ENTRY_DATE	Date	8		
61	ENTRY_TIME	Character	5		
62	USER_NAME	Character	35		
63	MANYTOONE	Character	1		
64	PO	Character	1		
65	OCTROI	Character	1		

Cont. on next page

Sample 2 (cont.)

<i>Field #</i>	<i>Field Name</i>	<i>Type</i>	<i>Width</i>	<i>Dec</i>	<i>Description</i>
66	DBMEMO	Character	10		
67	MEMODT	Date	8		
68	SUB_DT	Date	8		
69	VALUE	Numeric	12	2	
70	FREIGHT	Numeric	10	2	
71	OCT_PER	Numeric	5	2	
72	TCNO	Character	10		
Total (record length)				511	
Record length per Assessee				512	
Difference to follow up				1	

Sample 3

Date of last update: 05/16/03					
Field	Field Name	Type	Width	Dec	Description
1	TS_UNIT	Character	1		
2	SNO	Numeric	2		This is record no in the database
3	INV_NO	Character	6		The invoice serial no.
4	INV_DT	Date	8		The date of invoice
5	PO_NO	Character	25		Reference to Purchase Order
6	PO_DT	Date	8		Purchase order Date
7	PO_SNO	Numeric	2		Serial no. in Purchase Order
8	OLD_MCODE	Character	9		Assessee's old Material Code
9	MCODE	Character	9		Assessee's new Material Code
10	PART_NO	Character	12		Customer's new Part No
11	PART_DESC	Character	42		Customer's part description
12	OLD_CODE	Numeric	5		Customer's old Part No
13	PTCODE	Character	5		
14	SCHEDULE	Numeric	7	4	Schedule No. against which being supplied
15	UNIT	Character	3		Unit of qty
16	CASES	Character	5		Type of packages
17	QTY	Numeric	10	3	Qty
18	RATE	Numeric	9	2	Rate at which sales are effective
19	PACK_PER	Numeric	5	2	% at which packing charges are charged
20	PACK_RATE	Numeric	7	2	Rate at which packing charges are charged
21	DIS_RATE	Numeric	5	2	Rate at which discount is allowed
22	DIS_AMT	Numeric	10	2	Total Amount of discount allowed
23	BASIC	Numeric	12	2	Basic net sales Price
24	DAC_RATE	Numeric	10	2	Die Ammortisation charges -Rate
25	FOC_RATE	Numeric	10	2	Free of cost supply - rate
26	DAC	Numeric	10	2	Die Ammortisation charges -Amount
27	FOC	Numeric	10	2	Free of cost supply - AMount
28	PACK_FWD	Numeric	12	2	Packing charges
29	PKG_FWD	Numeric	12	2	Forwarding charges
30	EX_DUTY	Numeric	5	2	Excise Duty Rate
31	RATE_SED	Numeric	5	2	SED Rate

Contd. on next page

Sample 3 (cont.)

<i>Field</i>	<i>Field Name</i>	<i>Type</i>	<i>Width</i>	<i>Dec</i>	<i>Description</i>
32	BED_AMT	Numeric	12	2	BED Amount basic
33	BED_AMT1	Numeric	12	2	BED Amount others (DAC + P&F)
34	SED_AMT	Numeric	12	2	SED Amount basic
35	SED_AMT1	Numeric	12	2	SED Amount others (DAC + P&F)
36	TAX_CD	Character	2		Tax code applicable
37	CL_CODE	Character	1		
38	CL_PER	Numeric	5	2	
39	ST_AMT	Numeric	10	2	Sales Tax Maharashtra
40	ST_AMT1	Numeric	10	2	Central Sales Tax
41	SCHARGE	Numeric	5	2	Surcharge on MST
42	STSUR_AMT	Numeric	8	2	Surcharge on CST
43	OTH_CHG	Numeric	9	2	Other recoveries
44	OTH_AMT	Numeric	12	2	Total Bill AMount
45	BILL_AMT	Numeric	12	2	
46	GP1_TM	Character	5		GP1 time
47	SER	Character	2		AM/PM
48	TAR_CODE	Character	2		Tariff Code
49	TAR_NO	Character	7		Tariff Item No.
50	PROD_NAME	Character	25		Tariff Description
51	DB_BED	Character	1		BED Debit Indication
52	REG_NO	Character	6		Debit Register No.
53	VNO	Character	13		
54	TRANS	Character	30		Transporter
55	TRANSMODE	Character	12		Mode of Transport
56	LR_NO	Character	25		Lorry Receipt No
57	LR_DT	Date	8		LR Date
58	ST31_NO	Character	15		Sales Tax Form No.
59	SRV_NO	Character	10		
60	SRV_DT	Date	8		
61	NO_57F3	Character	15		
62	PAY_TERM	Numeric	3		
63	CANCELLED	Logical	1		Cancellation Indicator
64	DATECANC	Date	8		Date of cancellation

Contd. on next page

Sample 3 (cont.)

<i>Field</i>	<i>Field Name</i>	<i>Type</i>	<i>Width</i>	<i>Dec</i>	<i>Description</i>
65	TIMECANC	Character	5		Time of cancellation
66	REM	Character	130		Reasons for cancellation
67	ANNEX_NO	Character	6		
68	FOC_REQ	Character	1		
69	PACK_TEMP	Numeric	12	3	
70	HUNDI_FLAG	Character	1		
71	EX_FLAG	Character	1		
72	MODEL_NO	Character	3		
73	RMC_RATE	Numeric	12	2	
74	RMC_COST	Numeric	12	2	
75	AM_NO	Character	25		
76	AM_DT	Date	8		
77	MONTH	Numeric	2		
Total (record length)			817		
Record length per Assessee			818		
Difference to follow up			1		