STATEMENT 3.260

AUDITING GUIDELINE

AUDITING IN AN EDP ENVIRONMENT — GENERAL PRINCIPLES

Introduction

1. The glossary of terms incorporated in the Explanatory Foreword to Auditing Standards and Guidelines defines an audit as:

"the independent examination of, and expression of opinion on, the financial statements of an entity by an appointed auditor in pursuance of that appointment and in compliance with any relevant statutory obligation".

Auditing Standards prescribe the basic principles and practices which members are expected to follow in the conduct of an audit while Auditing Guidelines give guidance on the procedures and techniques which will enable the auditor to comply with Auditing Standards.

- 2. The purpose of this Guideline is to indicate those areas where additional guidance is necessary to comply with these basic principles when an audit is conducted in an electronic data processing (EDP) environment. For the purpose of this Guideline, an EDP environment exists when a computer of any type or size is involved in the processing of financial information of significance to the audit, whether that computer is operated by the entity or by a third party (e.g. a computer service bureau).
- 3. The overall objective and scope of an audit does not change in an EDP environment. However, the use of a computer changes the processing and storage of financial information and may affect the organization and procedures employed by the entity to achieve adequate internal control. Accordingly, the procedures followed by the auditor in the study and evaluation of the accounting system and related internal controls and the nature, timing and extent of the audit procedures may be affected by an EDP environment. Separate auditing guidelines will give further guidance on audit procedures appropriate to an EDP environment.

Skills and competence

4. The skills required when auditing in an EDP environment include a knowledge of computer hardware, software and processing systems; the level of knowledge will depend on the nature of the

- EDP system. These skills are required to plan the engagement and to understand how EDP affects the study and evaluation of internal control and the application of audit procedures, including computer-assisted audit techniques (CAATs).
- 5. The auditor should have all of the EDP skills necessary for a particular audit engagement or should involve others who possess the required skills to assist in designing and applying the audit procedures.

Work performed by assistants and other auditors and experts

6. The auditor continues to be responsible for forming and expressing an opinion on the financial information when he delegates work to assistants or uses work performed by other auditors or experts. Accordingly, the auditor should have sufficient knowledge of EDP to direct, supervise and review the work of assistants with EDP skills or to obtain reasonable assurance that the work performed by other auditors or experts with EDP skills is adequate. Furthermore, when the EDP system is an integral part of the accounting system and related internal controls, the auditor should not delegate the responsibility for forming important audit conclusions.

Planning

- 7. Auditing Guideline 3.210 "Planning, controlling and recording" emphasizes that an auditor's work needs to be planned at each stage of its progress. He should therefore be aware that the initial audit plan may need to be modified as the audit progresses. It is, however, necessary to establish an initial audit plan which takes into account the EDP environment.
- 8. The auditor should therefore gather information about the EDP environment that is relevant to the audit plan, including:
 - (a) a preliminary understanding of how the EDP function is organized and the extent of concentration or distribution of computer processing throughout the entity;
 - (b) an identification of the computer hardware and software used by the entity;
 - (c) a preliminary understanding of each significant accounting application processed by the computer, the nature of processing (for example, batch, on-line) and data retention policies; and
 - (d) an identification of the planned implementation of new applications or revisions to existing applications.

- 9. When developing the overall plan the auditor should consider matters such as:
 - (a) planning how, where and when the EDP function will be reviewed;
 - (b) determining the degree of reliance he expects to be able to place on internal controls in his overall audit approach;
 - (c) planning so that there is a reasonable expectation of detecting material misstatements in the financial information resulting from fraud and error;
 - (d) planning audit procedures to involve an appropriate selection of manual techniques and/or CAATs; and
 - (e) scheduling audit work of assistants, experts or other auditors, as applicable.

Accounting system and internal control

10. During the review and preliminary evaluation of internal control the auditor should acquire knowledge of the accounting system to gain an understanding of the overall control environment and the flow of transactions. If the auditor plans to rely on internal controls in conducting the audit, consideration should be given to the manual and computer controls affecting the overall EDP function (general EDP controls) and the specific controls over the accounting applications (EDP application controls) as defined in paragraphs 13 and 16 of the Auditing Guideline 3.261 "The effects of an EDP environment on the study and evaluation of the accounting system and related internal controls". In gaining this understanding, the auditor should consider the effects of the general EDP controls, or the lack thereof, on the processing of transactions. Whether reliance is planned or not, it is essential that the auditor obtains an understanding of the accounting system.

Audit procedures

- 11. The nature, timing and extent of compliance and substantive procedures to obtain sufficient appropriate audit evidence may be affected by an EDP environment in several ways, including the following:
 - (a) it may be necessary to perform certain substantive tests at an earlier date than usual;

- (b) there may be scope for reducing audit work where there is an integrated EDP accounting system;
- (c) the auditor has the option of using the computer as an audit tool.
- 12. The use of CAATs (as described in the Auditing Guideline 3.262 "Computer-Assisted Audit Techniques") may be required because:
 - (a) the absence of input documents or the generation of accounting transactions by computer programs may preclude the auditor from manually verifying the completeness and accuracy of processing of accounting transactions;
 - (b) the transient nature of processing may preclude the auditor from manually following transactions or the application of controls through the EDP system; and
 - (c) the lack of hardcopy output and the retention of data in a format readable only by the computer (machine readable) may preclude the use of manual techniques in the effective performance of audit procedures.

If CAATs are used the timing of audit procedures may be affected because data may not be retained in computer files for a sufficient length of time for audit use, and the auditor may have to make specific arrangements to have the files retained or copied.

- 13. The effectiveness and efficiency of audit procedures may be improved through the use of CAATs to obtain and evaluate audit evidence, for example:
 - (a) some transactions may be tested more effectively and/or efficiently by using CAATs to examine all or a greater number of transactions in a computer file than would otherwise be selected;
 - (b) in applying analytical review procedures, transaction or balance details may be reviewed and reports printed of unusual items more efficiently than by manual method;
 - (c) the use of CAATs may make substantive procedures more efficient than placing reliance on controls and related compliance procedures.

Documentation

14. Where audit work is carried out in an EDP environment the considerations concerning the contents and standardization of audit working papers, outlined in paragraphs 18 to 24 of Auditing Guideline 3.210 "Planning, controlling and recording", are equally applicable. Documentation in respect of this audit work, which may be in machine readable form, should be designed so as to integrate with the overall audit documentation and be adequately stored and available so that it provides evidence to support the audit procedures and findings.