Mainland audit issues - revenue recognition for software companies

The Questions and Answers (Q&As) below are developed by the Working Group on Mainland Audit Issues of the HKICPA Auditing and Assurance Standards Committee (AASC) to raise practising members' awareness of the common audit issues that may be encountered by auditors in the audits of the financial statements of Mainland enterprises that are prepared under HKGAAP framework. They should be read in the light of Statements of Auditing Standards.

This set of Q&As addresses some of the common issues relating to revenue recognition for software companies in the Mainland, including some background information on issues that are specific to software companies in the Mainland, the basic principles for revenue recognition, suggested audit procedures and the recognition of fees for system maintenance, upgrade and enhancement.

The Working Group welcomes your comments and feedback, which should be sent to <u>commentletters@hkicpa.org.hk</u>, for the attention of Stephen Chan, Technical Director (Ethics & Assurance) & Head of Standards & Technical Department Coordination.

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- Q1: What are the major issues and challenges for software companies in the Mainland that may have significant effect on the financial statements or the work of auditors?
- A1: Software companies are mainly engaged in the businesses of software development, internet, website, IC design, and etc. Software development usually involves a system development cycle including feasibility study and analysis, design, implementation, test and maintenance. The speedy evolution of technology trends may affect the timing of development and implementation. The industry usually involves a high degree of research and scientific sophistication, and specialist analytical methodology.

Major issues and challenges for the software development industry include incomplete system development life cycle, inadequate information and technological documentation, different proprietary information technology standard, self-protective manner, regional regulatory requirements and different governmental jurisdiction, confidentiality and security on local government information system development projects. In the Mainland, it is not uncommon that the contractual terms in respect of software development projects often place great emphasis on the final acceptance of the products by the customer and the retention money while other terms are usually not comprehensive enough. The recognition of revenue of some companies may also be driven by tax regulations rather than by accounting principles.

Because of the above major issues and challenges, it is often difficult to assess the stage of completion of the contract with certainty. In most cases, the billed/invoiced amounts do not necessarily reflect the actual stage of completion of the information

system development project. Although there may be some milestones to identify the different stages of completion/acceptance, there is usually a clause in the contract stating that the final completion of the project is conditional on the final acceptance of the system by the customers, which could come long after the project work had been done. It is generally accepted that the customers have to take considerable time to test run the system. This creates uncertainties in the recognition of the revenue and the relevant cost of development. In some cases, the customer orders a ready-made system, such as SAP, but may require the provider to customize the ready-made system to fit the customer' specifications. This may create uncertainties in splitting the revenue into two parts: sale of the ready-made system and the service income on customizing the ready-made system. There may also be uncertainties in determining the timing of recognizing the revenue of sale of the ready-made system. Some system development projects may involve the sales of hardware, such as servers and PCs in addition to network development and design. The auditors may have to face with the issues of splitting the contract revenue into hardware sales and software development as well as determining the timing of revenue recognition.

Finally, in software development, the enterprise may have to frequently provide maintenance services, upgrade and enhance the versions of its products, e.g. games design. It may sometimes be difficult to quantify the revenue on maintenance, upgrades and enhancements since the development costs incurred for the old versions could bring benefits to the new version. It makes uncertainty in determining the amortization period of the capitalized development costs for the old versions.

Q2: What are the basic principles of revenue recognition applicable to software companies in the Mainland?

A2: In the Mainland, there is no specific guideline on revenue recognition for software companies. As a significant portion of revenue of those enterprises is generated from rendering of services, the accounting standards on service revenue are usually used as a reference.

In accordance with the Statement of Standard Accounting Practice 18 "Revenue" ("SSAP 18") issued by the Hong Kong Institute of Certified Public Accountants, when the outcome of a transaction involving the rendering of services can be estimated reliably, revenue associated with the transaction should be recognized by reference to the stage of completion of the transaction at the balance sheet date.

The outcome of a transaction can be estimated reliably when all the following conditions are satisfied:

- a. the amount of revenue can be measured reliably;
- b. it is probable that the economic benefits associated with the transaction will flow to the enterprise;
- c. the stage of completion of the transaction at the balance sheet date can be measured reliably; and
- d. the costs incurred for the transaction and the costs to complete the transaction can be measured reliably.

The stage of completion of the services may be determined by one of the following methods:

- a. surveys of work performed;
- b. the proportion of services performed to the total services to be performed; or
- c. the proportion of costs incurred to the estimated total costs.

There are some cases that the outcome of the transaction involving the rendering of services cannot be estimated reliably. According to SSAP 18, in such cases, revenue should be recognized only to the extent of the expenses recognized that are recoverable.

SSAP 18 is similar to the Accounting Standard for Business Enterprises ("ASBE") "Revenue"(企業會計準則 — "收入") issued by the Ministry of Finance of the PRC. The ASBE also mentioned that if the commencement and the completion of a service are within the same financial year, revenue should be recognized when the service is completed, and if they are not within the same financial year, the revenue should be recognized by reference to the stage of completion up to the year end date. Accordingly, for interim reporting of those listed companies in the Mainland, the revenue should be recognized by reference to the stage of completion up to the interim period end date.

Q3: What are the major issues relating to software companies in the Mainland when recognizing revenue and what procedures auditors may perform in order to identify the potential errors in the financial statements?

A3: Revenue recognition for software companies usually involves a high degree of professional judgment. The time frame of project development may change due to speedy evolution of technology trends and therefore it is often not easy to quantify the revenue and related cost based on the stage of completion. As a result, some enterprises in the Mainland may take an easy way to recognize revenue when the project is completed. There is a potential revenue recognition error which may have significant impact on the financial statements.

In order to assess whether there is potential problems in revenue recognition of software companies, auditors may consider to include the following procedures in the course of audit work, or other procedures as considered necessary:

- Discuss with client's management to understand the company policy on revenue recognition, billing and costing system;
- Assess the adequacy of internal controls over project development and management;
- Perform compliance tests on client's internal control on costing system;
- Measure the reliability and accuracy of project cost budget in the past;
- Review the terms of the relevant agreements to understand the status of the projects;
- Perform analytical review on the monthly gross profit ratio;
- Review the cost elements, and perform substantive tests and cut-off test on contract costs;
- Ensure that the billing is based on client's objective best estimate or amount certified;
- Obtain the budget of the project and review the basis of computation of the budget and test check for reasonableness;

 Involve specialists, say, computer audit team, to assess the reasonableness of total budgeted costs;

- Compare budget to actual cost and last year's budget to see if there is any significant discrepancy;
- If the project involves website, ask the client to demonstrate on-line how it works and test the relevant applications, and revisit the website or platform independently;
- Recalculate the percentage of completion;
- Perform reasonableness test by the computer audit team on the progress of the project to justify the percentage of completion; and
- Assess whether the outcome of the contract can be estimated reliably and ensure that revenue has been recognized only to the extent of contract cost incurred that is probable to be recovered.
- Q4: What are the procedures that auditors may perform in assessing the amount of fees for system maintenance, upgrade and enhancement included in the contract of a system development that should be recognized as revenue for a certain financial period?
- A4: It is quite common that a contract of software development project involves terms like system maintenance, upgrade and enhancement, as well as training services to the customers. There is no specific criteria to determine when to recognize revenue and costs in such situation.

Apart from the audit procedures mentioned in Question 3, the following additional procedures may be performed when assessing the amount of contract revenue to be recognized for a certain financial period:

- Review the detail terms of the project contract to assess whether the amount of system maintenance, upgrade or enhancement fee is separately specified and whether the fees are fixed or determinable.
- Enquire with the client about the timing, costing and billing policy of the maintenance, upgrade and enhancement procedures of the project.