# INSTITUTE OF CERTIFIED PUBLIC ACCCOUNTANTS

# AUDIT STAFF TRAINING WORKSHOP

### **LEARNING OBJECTIVES**

- \*DEFINITION OF AUDIT SAMPLING
- \*AUDIT SAMPLING OBJECTIVE
- SAMPLING SAMPLING
- **SAMPLE SELECTION METHODS**
- SAMPLING V/S NONSAMPLING RISK
- CONTROL V/S SUBSTANTIVE PROCEDURES
- SAMPLING SIZE DETERMINATION
- \*QUIZ/GROUP WORK

- \*Audit sampling is the application of audit procedures to selected piece of data(the sample) (IAS 530 audit sampling)
- The objective of the auditor, when using sampling;
- is to provide a reasonable basis for the auditor to draw conclusions about the population

- \*Is used by auditors because examining all of the available information is;
- ✓ Costly
- ✓Time- consuming
- ✓Impractical in the time allocated for the audit
- Is used in every audit regardless of client size

- When is sampling used?
- Exact information is needed
- Large population
- >Trade effectiveness for efficiency

Is everything in an audit done on a sampling basis?

- >No
- Sometimes it is necessary to examine the entire set(called the population) for example
- All individually material transactions get audited because when they are misstated, the financial are statements are misstated

#### SATISTICAL V/S NONSTATISTICAL

- Statistical sampling is any approach to sampling that involves;
- > random selection
- the use of probability theory to evaluate sample results,
- >measurement of sampling risk

#### STATISTICAL V/S NONSTATISTICAL

- >nonstatistical sampling is where the auditor does;
- not use statistical methods
- In the population

#### SATISTICAL V/S NONSTATISTICAL

- Advantges of statistical sampling
- > Formal approach towards planning
- > Sample size determined objectively
- Evaluation more precise and sampling risk quantified
- Disadvantages of statistical sampling
- ► Lack of judgment
- >Time consuming
- ➤ High sample size

#### SAMPLE SELECTION METHODS

- Random selection;
- > ensures that all items in the population have an equal chance of selection
- ➤ It often involves selection of a sample with the use of random numbers or random generators
- Systematic selection involves;
- Selecting items using a constant interval between selections
- > The first interval having a random start

#### SAMPLE SELECTION METHODS

- Haphazard selection
- May be alternative to random selection provided auditors are satisfied that the sample is representative of the entire population
- ➤ It's a selection of a sample without following any particular structured technique
- It requires care guard against making a selection biased

#### SAMPLE SELECTION METHODS

- Block selection;
- May be used to check whether certain items have particular characteristic
- For example an auditor may use a sample of 50 consecutive cheques to test whether cheques are signed by authorized signatories rather then picking cheques throughout the year

#### SAMPLING SELECTION METHODS

- Monetary unit sampling (mus) a subset of probability proportional to size(pps) sampling
- Each item in the population has a probability of being included in the sample proportionate to the ksh value of the item
- > Results in small sample size
- Not effective for understement or omission errors

#### STATISTICAL V/S NON STATISTICAL

- \*How do auditors decide to use statistical or nonstatistical sampling?
- Generally the audit firm makes this decision for all audits of a certain type(like a specified client size) based on these factors;
- The need to quantify sampling risk, which is more justifiable in case of a law suit in the event of an audit failure.

#### STATISTICAL V/S NON STATATISICAL

- Additional cost of designing selecting and evaluating a statistical sample
- Availability of computer software to assist in
- designing, selecting and/or evaluating the sample
- Ability of audit staff to properly implement statistical sampling

#### STATISTICAL V/S NON STATISTICAL

- \*Representative sampling- is one in which the characteristics in the sample of audit interest are approximately the same as those of the population
- Sample accurately represents the total population
- An auditor can increase the likelihood of a representative sample by using care in designing the sampling process and selection, and evaluating the results

Sampling risk-is the risk that an auditor makes an incorrect conclusion because the sample is not representative of the population(inherent part of the sampling)

- ▶ Controlled by;
- > Determining an appropriate sample size

- Ensuring that all items have an equal opportunity of selection
- > Mathematically evaluating sample results
- Nonsampling risk —is the risk that audit test do not uncover existing exceptions in the sample
- Results from;
- > Auditors failure to recognize exceptions
- > Inappropriate or ineffective audit procedures

- ➤ Controlled by;
- >Training and supervision
- Reasonable working conditions
- >effort

- Sampling consideration;
- Large samples decreases sampling risk, may be needed as population increases
- Sample items should relate to audit of objective being tested
- Sample items should be representative of the population, so results can be projected

- Must know your maximum tolerance misstatement level
- Must know your assessment of control risk
- Incomplete or missing items that cannot be sampled are considered deviations or misstatements

- Audit sampling fall into two general types;
- Internal control sampling-Study and evaluation of internal control(controls procedures)
- ✓ Selecting control procedures to verify compliance

- > Sampling substantive procedures
- ✓ Selecting components or transactions of account balances for verification

- Internal control sampling approach
- ✓ State the objective of the audit test( e.g. test operating effectiveness of ic)

- Decide whether auditing sampling applies
- Define attributes and exceptions conditions
- Define the population
- Define sampling unit(must be consistent with audit objectives)
- > Specify tolerable rate of deviation

- Specify acceptable risk of assessing control risk
- > Estimate the population exception rate
- Determine the initial sample size
- > Select the sample
- > Perform audit procedure

- > Evaluate the results by;
- ➤ Generalize from sample to the population
- Decide the acceptability of the population
- Sampling substantive procedures;
- >(Sampling account balances)
- Specify the audit objective of the test and define a misstatement

- Define the population from which the sample is to be taken
- Chose an appropriate sampling method
- > Determine the sample size
- Select sample items and perform the substantive procedure
- > Evaluate the results
- Document all phases of the sampling

- Substantive tests details of account balances
- Account balances of inventory
- ➤ Book value of inventory balance —ksh 3,000,000
- ➤ Book value of items sampled-ksh 100,000
- >Audited value of items sampled- ksh 98,000

- Total overstatement observed in auditksh 2000
- Ratio of misstatement 2000/100000=2%
- Apply ratio to entire population 3000000×2%
- ➤ Ksh 60,000 best estimate of misstatement

► If tolerable misstatement is ksh 50,000, we can conclude account is fairly stated because our best estimate of the projected misstatement is greater than tolerable misstatement

- Difference method
- Total number of items in population-805
- Number of items tested 100%-5
- Number of items tested in the sample-40
- Errors found in items tested 100%
- Errors found in sample-9000

- ➤ Potential error in sample[(805-5)×9000]/40=
- **≥**180000
- Actual error in items tested 100%-15000
- ➤ Potential error in population 180000+15000=195000

#### **SAMPLING SIZE**

- Value of population to be audited(e.g receivables)
- ►Ksh 2,000,000
- Individual area materiality ksh 200,000
- ► Risk factor 2.0
- Sampling interval(materiality level/risk factor)
- ►Ksh 100,000

#### **SAMPLING SIZE**

- If the test is for overstatement (e.g. trade \$ receivables)
- Total population-2,000,000
- Less; higher value items(to be tested 100%)-600,000
- Total of lower value items 1,400,000
- Divided by planned sampling interval 100,000
- Sample size of lower items value-14
- Add; sample size of higher value items-2
- Total sample size-16

#### QUIZ

\*Describe the procedures the auditor would perform where errors have been identified in a sample?

- Record the error on their schedule of uncorrected misstatement
- Investigate the reason for the error and determine whether it is an anomalous (one-off) error or a recurrent one

#### QUIZ

- Extrapolate the non-anomalous errors and determine the projected error for the population as a whole
- Where auditor is being used to perform tests of controls the auditor will compare the error rate to the level of tolerable error (tolerable error rate)

#### QUIZ

- Where sampling is being used to perform substantive testing the monetary value of the error will be extrapolated and compared to the monetary value of tolerable error
- Where sampling is being used to perform substantive testing the monetary value of the error will be extrapolated and compared to the monetary value of tolerable error

## END

# \*THANK YOU

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