

## **10. EVALUATING AUDIT RESULTS**

### **10.1 Evaluating Financial Audit Results**

By the end of the fieldwork stage the auditors will have completed their audit programmes and documented the results of their work. Part of this work will have involved the identification of monetary errors, compliance with authority violations, internal control deviations, etc. These errors and deviations need to be dealt with during the evaluation phase.

Error evaluation is done in stages. First the auditor reaches a conclusion on the results of each test. Next, the auditor reaches a conclusion on each component. Finally, the auditor reaches a conclusion on the financial statements as a whole.

As described earlier in this Manual, the optimum mix of tests of internal control, analytical procedures and substantive tests of details for one specific financial audit or compliance objective for one component may be totally different than for a different objective or component. Appendix B provides a non-technical discussion on the theory behind the overall error evaluation process – how the auditor can combine different sources of assurance to reach an overall conclusion on the financial statements.

#### **10.1.1 Use of CAATS**

Evaluation of fieldwork results hinges on the application of a number of error-based calculations, as described in the following section.

Computer-assisted auditing techniques (CAATs) are useful in determining the most likely error and the upper error limit for individual substantive tests of details, or the most likely deviation rate and the maximum possible deviation rate for individual tests of internal control. This is because the easiest way to perform and document these calculations is to use the error evaluation function of a CAATs product.

Advantages of CAATs over manual evaluation of errors are:

- Calculations are much quicker using computer power;
- Manual calculations are complex and prone to error – computers produce much more accurate and reliable results;

Auditors are therefore strongly encouraged to use CAATs. DAGP is establishing a capability to provide access to auditors across the department.

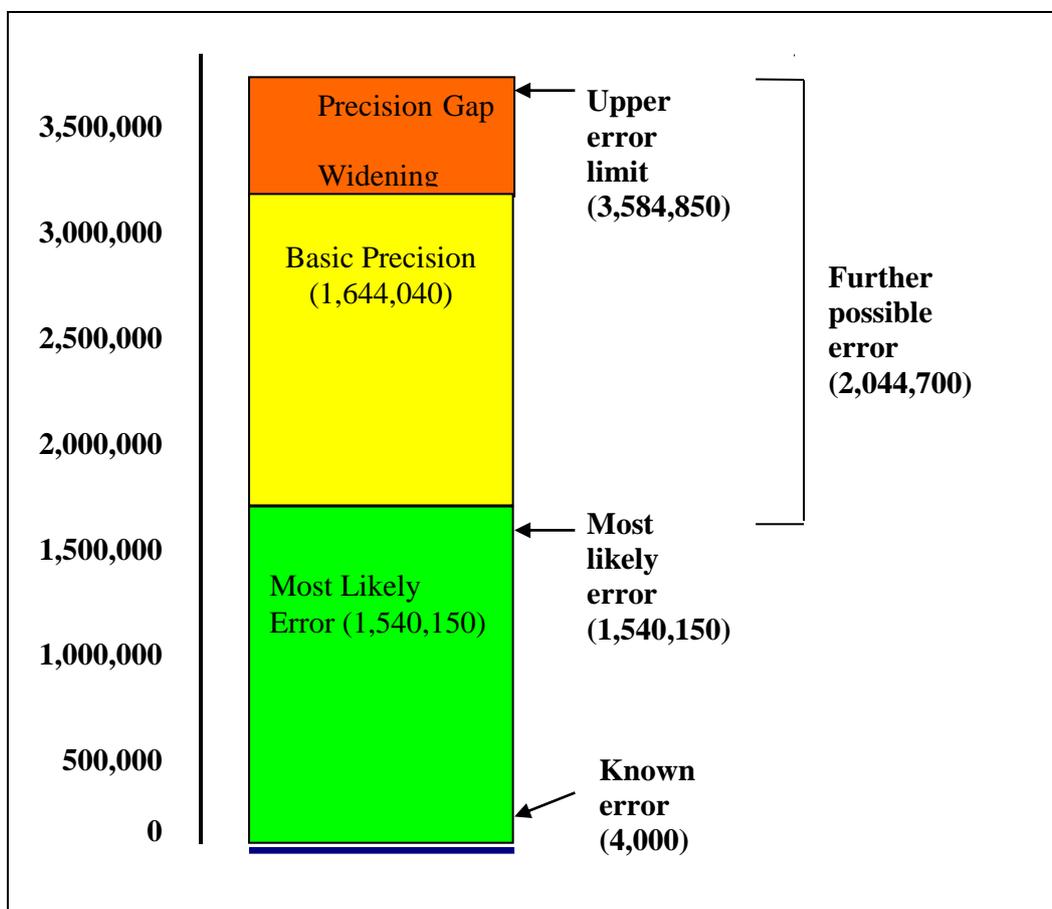
There may be circumstances in which manual calculations are judged to be appropriate. For this reason, the Standard Audit Working Paper Kit contains standard forms that can be used.

### **10.2 Known errors, most likely errors, further possible errors and maximum possible errors**

Error evaluations are performed by projecting the findings from a representative sample to the population as a whole. The rest of this Chapter illustrates the process based on sampling from a population of supplier invoices.

Some key terms used in this chapter are Known Error (KE), Most Likely Error (MLE), Further Possible Error (FPE), Maximum Possible Error (MPE) and Upper Error Limit (UEL). They are illustrated in the figure below for reference when reviewing later sections of this Chapter.

Figure 10.1: Known Error, Most Likely Error, Further Possible Error and Upper Error Limit – Overstatement Errors



### 10.2.1 Known error

The known error is the sum of the errors that the auditor actually finds during the audit.

If for example, the auditor tests a sample of 181 supplier invoices out of a population of 30,000 and finds 5 overstatement errors totalling Rs. 4,000, then the known error is Rs. 4,000.

### 10.2.2 Most likely error (MLE)

The most likely error (MLE) represents the auditor’s best estimate of the error in the population.

In the example, the auditor has only selected a sample of 181 supplier invoices out of a population of 30,000. There are likely to be more overstatement errors than just the Rs. 4,000 found in the sample. The auditor needs to estimate the most likely error in the population based on the results of the sample.

Using the approach illustrated in Appendix B, the auditor determines the MLE in the population to be Rs. 1,540,150.

### **10.2.3 Upper error limit (UEL)**

The auditor has only taken a sample of 181 supplier invoices out of 30,000 supplier invoices. Therefore, it is very likely that the actual error in the population will not be exactly Rs. 1,540,150. The actual error could be larger or smaller than Rs. 1,540,150.

The upper error limit (UEL) represents the maximum possible error that could exist in the population at a given confidence level.

The reason for the phrase “at a given confidence level” is because the upper error limit will be different depending on the confidence level the auditor wishes to achieve. With a MLE of Rs. 1,540,150, the auditor would be very confident that the actual error in the population is less than Rs. 10,000,000, but would have less confidence that the actual error in the population is less than Rs. 2,000,000.

As discussed in detail in Appendix B, the auditor normally does two error evaluations – one for overstatement errors and one for understatement errors. The auditor then combines the results of the two evaluations.

Using the techniques illustrated in Appendix B, the auditor is able to conclude that:

- (1) The population is not overstated by more than Rs. 3,584,850; and
- (2) the population is not understated by more than Rs. 103,890.

### **10.2.4 Further possible error**

The further possible error is the difference between the UEL and the MLE. It has two components – basic precision and precision gap widening.

In our example, the further possible error for overstatements is Rs. 2,044,700, being the difference between the UEL of Rs. 3,584,850 and the MLE of Rs. 1,540,150.

### **10.2.5 Basic precision**

Basic precision is the possible error that could exist in the population even if no errors are found in the sample. It therefore represents the upper error limit when the most likely error is nil.

Assume the audit fieldwork uncovers no understatement errors. Therefore, the most likely understatement error is Rs. nil. However, it is difficult to believe that there isn't a single understatement error in any of the 30,000 supplier invoices.

In fact, with a desired 95% confidence level, the auditor determines basic precision to be Rs. 1,644,040. The auditor can therefore conclude with 95% confidence that the understatement errors in the population sum to a maximum of Rs. 1,644,040.

When the basic precision value, Rs. 1,644,040, is netted against the MLE for overstatements of Rs. 1,540,150, the auditor gets the UEL for understatements of Rs. 103,890.

Note that basic precision is the same amount for both overstatement errors and for understatement errors. The same Rs. 1,644,040 is also used for the evaluation of overstatement errors.

### **10.2.6 Precision gap widening**

Basic precision does not represent the total amount of the further possible error. The reason is that, for each additional Rs. 1 in the MLE, the UEL increases by more than Rs. 1. Precision gap widening is the additional further possible error that results from finding errors in the population.

In the above illustration, the precision gap widening for overstatement errors is Rs. 400,660. (There is no precision gap widening for understatement errors as no understatement errors were found in the sample.)

The sum of the Rs. 400,660 precision gap widening amount and the Rs. 1,644,040 basic precision amount is Rs. 2,044,700 – the further possible overstatement error.

### **10.2.7 Compliance with authority violations and internal control deviations**

The above illustration has been based on a monetary error. The same terminology and process are used for compliance with authority violations and internal control deviations.

For example, assume the auditor tests 184 supplier invoices out of a population of 30,000 and finds 5 invoices that have not been approved. The auditor could then calculate the most likely amount of the unapproved expenditures, and the maximum possible amount of the unapproved expenditures. The only difference in the process is that, since we are dealing with approvals, all errors will be 100% errors i.e. the full amount of the invoice. An invoice cannot be 50% approved.

## **10.3 Determining the cause of errors, violations and deviations**

In the illustration discussed above, the auditor is projecting the results of the sample onto the entire population. The auditor is assuming that the sample is representative of the population, and that the monetary errors, compliance with authority violations and internal control deviations found are therefore representative of the errors and deviations that exist in the population as a whole.

This is normally the appropriate assumption to make. The auditor selects the sample from the population in a way that is designed to produce a representative sample. Therefore, the auditor can conclude that the sample results are representative of the population. If the auditor concluded that the results were *not* representative of the population, the auditor would be effectively concluding that the sample itself was not representative of the population. The auditor would then need to select another sample and repeat all the audit procedures.

As a result, it is normally not acceptable to conclude that a monetary error, a compliance with authority violation or an internal control deviation found in a sample is an “isolated incident” and therefore does not need to be projected over the population.

However, there may be rare cases where a particular monetary error, compliance with authority violation or internal control deviation is clearly not representative of the entire population. These would include cases where the cause of the error, violation or deviation was

so unique that it is safe to assume that there could not be too many other similar items in the entire population.

One case where this can happen is where the auditor selects one sample of transactions from a population made up of numerous ministries and finds an error that clearly could only relate to one ministry. In this case, the auditor could divide the ministries into two populations – those to which the error could potentially relate and those to which the error could not possibly relate. The auditor would then divide the sample on the same basis and perform two separate error evaluations.

Therefore, the auditor needs to consider the cause of each monetary error, compliance with authority violation and internal control deviation found in his/her sample to determine if there is any reason why the sample results should not be projected over the entire population.

There are several other reasons for the auditor to determine the cause of each monetary error, compliance with authority violation and internal control deviation uncovered:

- (a) In the case of a test of internal control, the auditor may need to reduce reliance on a specific control and replace that reliance with additional assurance from substantive tests of details. Unless the auditor can determine the cause of the internal control deviation, the auditor may not be able to determine the substantive tests to perform. The auditor could wind up performing substantive tests that do not deal directly with the same error conditions, and do not provide the required amount of compensating assurance.
- (b) Also in the case of a test of internal control, the auditor needs to determine the cause of the deviation to develop an appropriate recommendation to help prevent the deviation from occurring in the future.
- (c) In the case of a substantive test, as illustrated below, errors that affect a closing balance carried forward in one year may affect the opening balance brought forward in the following year. The auditor needs to determine the cause of the error to determine which errors could affect opening balances for the following year.
- (d) Further to (c), the same type of monetary error, compliance with authority violation or internal control deviation may recur in the following year. Investigating the cause of the error, violation or deviation found in the first year might help the auditor to arrive at a more accurate estimate of the most likely amount in the following year. It should also help the auditor to better plan the following year's audit.
- (e) Also in the case of a substantive test, the auditor needs to determine the cause of the monetary error or the compliance with authority violation to identify the particular internal control(s) that may need to be re-evaluated. And, as above, the auditor needs to determine the cause of the error to develop an appropriate recommendation to help prevent the error from occurring in the future.

## **10.4 Concluding on the results of each test**

This process is somewhat different depending on whether the auditor is performing a test of internal control, an analytical procedure or a substantive test of details. Each is discussed in turn below. This section starts, though, with a discussion on determining known monetary errors, compliance with authority violations and internal control deviations.

### **10.4.1 Determining known monetary errors, compliance with authority violations and internal control deviations**

Determining known monetary errors, compliance with authority violations and internal control deviations is normally quite straightforward. At the planning stage, the auditor updates the financial audit objectives and related compliance with authority objectives and error conditions. He or she then designs audit procedures to obtain the required amount of assurance for each error condition.

Sometimes, though, the determination of a monetary error, a compliance with authority violation or an internal control deviation is not all that straightforward. For example, the auditor may be confronted with:

- (a) Some doubt as to the substance of the transaction.
- (b) Some doubt as to whether a particular transaction is adequately supported.
- (c) Conflicting audit evidence affecting the transaction being audited or the test being performed. For example, one entity official may provide the auditor with information that is inconsistent with information provided by another entity official.
- (d) Some doubt as to whether the entity's explanation for a significant fluctuation identified in an analytical procedure adequately explains the fluctuation.
- (e) Vaguely worded legislation or other authorities that make it difficult to determine precisely what is required.
- (f) Errors that are subsequently detected by entity officials.

As an example of (f), consider an overpayment to a supplier. Entity officials may have identified the error and requested a reimbursement from the supplier. In this case, there may or may not be a monetary error in the accounts, depending on the whether:

- The overpayment had been reimbursed by year-end; or
- The accounting policies being followed would not consider this to be a monetary error even if the overpayment had not been reimbursed.

Similarly, while the internal controls over the original payment may have failed to prevent the overpayment from occurring, the entity may have had other controls that ultimately detected the overpayment. If that was the case, the auditor may conclude that there is no weakness in the overall internal control structure. On the other hand, if the overpayment has been brought to light by the supplier notifying the entity of the overpayment, then the auditor would conclude that there is a weakness in the internal control structure.

Such matters should be resolved by discussing all potential errors and deviations with entity officials. In fact, given the impact that a monetary error in one small transaction can have on the most likely error and the upper error limit, it is prudent to discuss *all* errors and deviations with entity officials no matter how clear cut they are from the auditor's perspective.

### **10.4.2 Concluding on the results of each test of internal control**

The auditor should reach a conclusion on a test of an internal control sample by determining the number of internal control deviations (violations of specific internal controls) in the sample, and the maximum possible deviation rate, and then comparing the maximum possible deviation rate to the tolerable deviation rate.

Should the maximum possible deviation rate be less than or equal to the tolerable deviation rate, the auditor can place the desired level of reliance on the control.

Should the maximum possible deviation rate exceed the tolerable deviation rate, the auditor reduces reliance on the internal control, and obtains additional assurance through other procedures. The auditor may also have other options, as discussed below.

Suppose the auditor selects a sample of 42 supplier invoices and finds 2 internal control deviations – 2 supplier invoices that are not properly approved. The auditor can use a CAATs to arrive at a maximum possible deviation rate of 12.18%. Since the tolerable deviation rate was 9%, this is an unacceptable result. The process for doing this is described in Appendix B.

### **10.4.3 Analytical procedures**

The auditor should investigate significant fluctuations identified by analytical procedures and evaluates the results. Appendix E provides details of the process.

If the investigation is completed successfully, the auditor will have obtained the desired amount of assurance from the analytical procedure.

If the investigation is not completed successfully, the auditor will normally not have obtained the desired amount of assurance from the analytical procedure, and will need to obtain additional assurance through other procedures. The auditor may have other options as discussed below.

### **10.4.4 Substantive tests of details**

As described above, the auditor should determine the known error, the most likely error and the upper error limit, and then compares the upper error limit to the materiality amount to determine if there is the required amount of assurance.

Should the upper error limit be less than or equal to the materiality amount, the auditor can obtain the desired amount of assurance from the procedure.

Should the upper error limit exceed the materiality amount, the auditor's results are not acceptable. In this case, the auditor has several options, all of which are discussed below.

It should also be noted that, as discussed in Appendix B, the auditor can follow the same procedures to determine a most likely error and an upper error limit whether using statistical or non-statistical sampling. GAAS in many countries requires the auditor to determine an upper error limit regardless of the sources of audit assurance.

## **10.5 Concluding on the results of each component**

Having concluded on the results of each individual test of internal control, analytical procedure and substantive test of details, the auditor must combine these results to reach a conclusion on the component being audited.

If the auditor is faced with numerous monetary errors, compliance with authority violations and/or internal control deviations, the auditor may first wish to reach a conclusion on each

specific financial audit objective and compliance with authority objective within each component, as opposed to reaching a conclusion on the whole component.

Note that the same terminology and process is used for compliance with authority violations, internal control deviations and monetary errors.

### **10.5.1 Determining the most likely error and upper error limit**

The auditor should consider the results of all tests of internal control, analytical procedures and substantive tests of details and use professional judgment to estimate the most likely error and the maximum possible error in the component.

If the results of all of the auditor's procedures are consistent with each other, this may not be difficult. For example, assume the auditor has:

- (a) concluded that the applicable internal controls are functioning well enough to prevent and detect material error;
- (b) not found any significant fluctuations through analytical procedures; and
- (c) has an upper error limit from substantive tests of details that is less than the materiality amount.

In this case, the auditor may conclude that the most likely error and the upper error limit determined from his substantive tests of details are the best estimates of the most likely error and the upper error limit in the component as a whole.

Sometimes, though, the auditor is faced with conflicting audit evidence. Suppose the auditor's analytical procedures indicate that material error exists in a particular component, while the auditor's substantive tests of details indicate that there are no errors in the component.

In this case, it is not appropriate for the auditor to ignore the results of his/her analytical procedures and to conclude that the most likely error in the component is Rs. nil. The auditor should seek further evidence to determine whether the results of the analytical procedures or the results of the substantive tests of details are correct.

One way to resolve conflicting audit evidence is to seek input from entity officials. Entity officials may be able to provide the auditor with additional information that helps to explain the fluctuation identified by the analytical procedures.

As a second example, consider the reverse situation – the auditor's analytical procedures indicate that material error does not exist in a particular component, while the auditor's substantive tests of details indicate that material error does exist in the component.

Again, it is not appropriate for the auditor to ignore the results of analytical procedures. The auditor may, in fact, have a substantive sample that is not representative of the population.

To resolve the conflicting audit evidence the auditor could ask entity officials to perform a detailed investigation of the specific errors identified by the auditor, or of the entire component to determine the actual error in the component.

The auditor should not take any assurance from the affected audit procedures until such time as the conflicting audit evidence is satisfactorily resolved. To do so would be to ignore

evidence that indicates that the results of at least one of the procedures is not correct, or that there are causes of the errors that are yet to be identified.

### 10.5.2 Reaching the conclusion

The comparison that the auditor performs at the end of this stage of the evaluation process is essentially the same as the comparison that the auditor makes when evaluating the results of an individual substantive test of details. If the upper error limit is less than or equal to the materiality amount, the results are acceptable. If the upper error limit exceeds the materiality amount, the results are unacceptable.

If the most likely error in the component is larger than the expected aggregate error that was allowed for when planning the audit then, as a general rule, the upper error limit will exceed the materiality amount.

The auditor can follow the same procedures to determine a most likely error and an upper error limit when using statistical or non-statistical sampling.

### 10.5.3 Case study

The process followed by the auditor in evaluating the audit results of a financial attest audit can be explained by the use of an example.

Consider a small independent power production plant (with separate financial statements) within the overall operation of WAPDA.

Revenue is obtained from the sale of electricity. The expenditures on diesel fuel, equipment and other production expenses are recorded separately from other expenditures such as administration. The storage of diesel fuel is the main component of year-end inventory.

Auditors have identified overstatements of the production expenditure amount and the accounts payable amount, but have found the year-end inventory amount to be correct. Assume no other monetary errors are found in the cost of sales amount, and that there is no conflicting audit evidence that needs to be resolved.

Following the approach described above, the auditor would conclude that the most likely error and the upper error limit determined from the substantive test of details are the best estimates of the most likely error and the upper error limit in the cost of sales.

The auditor would have the results shown below.

**Figure 10.2: Error evaluation for Production Expenditure**

	<b>Overstatements</b>	<b>Understatements</b>
Most likely error (MLE)	1,540,150	nil
Basic precision (BP)	1,644,040	1,644,040
Precision gap widening (PGW)	<u>400,660</u>	<u>nil</u>

Total of MLE, BP and PGW	3,584,850	1,644,040
(Less): “Opposing” MLE	( nil)	(1,540,150)
Net UEL in component	<u>3,584,850</u>	<u>103,890</u>

As materiality is Rs. 3,000,000, this is an unacceptable result for this component, which must be taken into consideration when concluding on the financial statements as a whole.

## 10.6 Concluding on the financial statements as a whole

Once the auditor has drawn conclusions from the results on each individual component, he or she must now combine the results to reach a conclusion on the financial statements as a whole.

As with reaching a conclusion on each component, conflicting audit evidence may arise. For example, the auditor may have concluded that the most likely errors in several expenditure components were negligible but that the most likely error in another expenditure component was close to materiality. If all of the expenditure components are subject to the same basic internal control structure, the auditor should investigate why the most likely error in the one component is so significantly different than the most likely errors in the other components.

### 10.6.1 Determining the most likely error and upper error limit

The basic rules are as follows:

- (a) For most likely errors – Net all overstatements and understatements;
- (b) For basic precisions – Use the largest basic precision for each of overstatements and understatements; and
- (c) For precision gap widenings – Add all precision gap widenings for each of overstatements and understatements.

The above process results in a very conservative overall error evaluation. This is because the largest basic precision for each of overstatements and understatements is being used, and because the sum of the precision gap widenings will almost always be much higher than if the entire financial statements were treated as one population and one overall sample had been taken.

To illustrate, assume the auditor has obtained the results shown below.

**Figure 10.3: Error Evaluation for Financial Statements – Results for Revenue and Expenditure Components**

Audit Area	MLE	BP	PGW	UEL
Revenue				
Overstatements	180,000	920,000	90,000	1,190,000
Understatements	20,000	920,000	10,000	950,000
Production Expenditures				
Overstatements	1,540,150	1,644,040	400,660	3,584,850
Understatements	Nil	1,644,040	nil	1,644,040
Other expenditures				
Overstatements	Nil	1,280,000	nil	1,280,000
Understatements	700,000	1,280,000	220,000	2,200,000

When performing the evaluation on the financial statements as a whole, the auditor needs to ensure that a common base is used when adding overstatements and understatements. The common base normally used in a Government context is a percentage of total expenditures. When using these bases, overstatements of revenues and understatements of expenditures would be added together as they would both overstate net income and residual equity.

Following the basic rules in paragraph, we would obtain the results in Figure 10.5 for the Statement of Revenue and Expenditure:

**Figure 10.4: Error Evaluation for Financial Statements – Overall Results for Statement of Revenue and Expenditure**

Audit Area	Understatements in Net Income	Overstatements in Net Income
Most likely error (MLE):		
Revenue	20,000	180,000
Production Purchases	1,540,150	nil
Other expenditures	Nil	<u>700,000</u>
<b>Total MLE</b>	<b><u>1,560,150</u></b>	<b><u>880,000</u></b>
<b>Basic precision (BP) (largest)</b>	<b><u>1,644,040</u></b>	<b><u>1,644,040</u></b>

Precision gap widening (PGW):		
Revenue	10,000	90,000
Production purchases	400,660	nil
All other expenditures	<u>Nil</u>	<u>220,000</u>
<b>Total PGW</b>	<b><u>410,660</u></b>	<b><u>310,000</u></b>
Total of MLE, BP and PGW	3,614,850	2,834,040
(Less): “Opposing” MLE	<u>( 880,000)</u>	<u>(1,560,150)</u>
<b>Net UEL in net income</b>	<b><u>2,734,850</u></b>	<b><u>1,273,890</u></b>

As materiality is Rs. 3,000,000 we would appear to have acceptable results. However, this is not the case. We still need to deal with the unacceptable results for production expenditures.

This is why the auditor needs to reach a conclusion on each component before doing an evaluation of the financial statements of a whole. Potentially material errors in one component may be “hidden” by offsetting errors in other components.

The same schedule as above would also be prepared for errors in the asset and liability accounts to come up with an overall error evaluation for the balance sheet and for the financial statements as a whole.

### 10.6.2 Evaluating the overall financial statement presentation and the reasonableness of the overall results

At the end of the evaluation phase, the auditor needs to step away from the mathematical calculations, the theory and the detail, and establish whether:

- (a) The overall financial statement presentation – both the amounts and the disclosures – properly present, in all material respects, the government’s financial position, the results of its operations, its cash flows and its expenditures and receipts by appropriation; and
- (b) The sums expended have been applied, in all material respects, for the purposes authorised by Parliament and have, in all material respects, been booked to the relevant grants and appropriations.

Where the auditor believes that they do not, he/she would need to estimate what changes are required to the recorded amounts and/or to the financial statement disclosures to deal with his/her concerns.

### 10.6.3 Assessing the achieved level of assurance

At the end of evaluation phase, the auditor also needs to determine whether the audit supports the desired level of overall audit assurance.

If, for example, control risk is assessed as “low” at the general planning phase but numerous internal control deviations or monetary errors are found during the fieldwork phase, then the assessment of control risk may need to be revised.

Similarly, the auditor may need to reconsider the assessment of inherent risk. If, for example, inherent risk is assessed as “low” but numerous monetary errors are found during the fieldwork phase, then the assessment of inherent risk may also need to be revised.

The Standard Audit Working Paper Kit contains an “Achieved Level of Assurance Form” that can be used to assist the auditor in this process.

## **10.7 Dealing with unacceptable results**

Where the evaluation of audit work provides unacceptable or ambiguous results, the auditor must determine a course of action. Actions to be taken in different circumstances are described below.

### **10.7.1 Most likely error less than materiality; upper error limit greater than materiality**

In this case, the auditor has four potential options:

1. Increase the materiality amount;
2. Increase the sample size;
3. Request entity officials to record a correcting entry; or
4. Request entity officials to perform a detailed investigation and then re-audit.

Each is discussed in turn.

*Increase the materiality amount.* In our case study, materiality was set at Rs. 3,000,000. However, determination of materiality is not an exact science, but instead depends on the auditor’s professional judgment. As such, setting materiality at Rs. 3,000,000 does not necessarily mean that an upper limit of Rs. 2,999,000 (or somewhat less) is always acceptable, or that an upper error limit of Rs. 3,001,000 (or somewhat more) is always unacceptable.

The margin of variance around the materiality amount is a matter of judgment. As a rule of thumb increasing the materiality amount by 25% would normally be considered acceptable, and increasing the amount by as much as 50% may be acceptable in some cases.

In our case study, our upper error limit for overstatement errors in cost of sales was Rs. 3,584,850 – only 19.5% more than the Rs. 3,000,000 materiality amount. In this case, the auditor may decide that the Rs. 3,584,850 really is not material, and that the results are acceptable.

*Increase the sample size.* Assuming that the original sample is representative of the population, it is unlikely that increasing the sample size will change the auditor’s estimate of the most likely error. However, increasing the sample size will normally decrease both basic precision and precision gap widening.

Increasing the sample size can result in the auditor performing a lot more work and still having unacceptable results. Therefore, the auditor should only use this option when:

- (a) The most likely error is significantly less than the materiality amount; and
- (b) The upper error limit is only slightly higher than the materiality amount.

In the example, the most likely error is more than 50% of the materiality amount. Therefore, it is unlikely that this approach would work.

At the same time, the upper error limit is 33.7% higher than the materiality amount. Therefore it is unlikely that increasing the sample size would work. This leads to a third option.

*Request entity officials to record a correcting entry.* The most likely error and the upper error limit can be decreased by the amount of any corrections made by entity officials. Should the adjustment be large enough, it may result in the upper error limit dropping below the materiality amount. Care must be taken when choosing this option. If the correction is made across the whole population and not just for the case within the sample (where the type of error can be recognised and corrected everywhere) then this is acceptable. Otherwise, even where the sample has been corrected there is no assurance that the same problem does not persist elsewhere. As a minimum, the auditor should take another sample and repeat the test.

In our example, if entity officials were to make a correcting entry to decrease the production costs by Rs. 1,540,150 – the amount of the most likely error – the upper error limit would be reduced to Rs. 2,044,700. This is much less than the Rs. 3,000,000 materiality amount.

Entity officials will rarely make an adjustment based on a most likely error. They will usually only be prepared to adjust for known errors. In our example, this would only reduce the upper error limit from Rs. 3,584,850 to Rs 3,580,850 – a negligible change. In this event, the next option is appropriate.

*Request entity officials to perform a detailed investigation, and then re-audit.* As noted above, entity officials will usually only be prepared to adjust for known errors. Therefore the auditor needs to get entity officials to perform a detailed investigation of the transactions in the population in order to arrive at a more accurate estimate of the error in the component. The auditor should then re-audit the component and request entity officials to record a correcting entry for the known error.

In our example, entity officials might perform a detailed investigation and conclude that cost of sales were overstated by Rs. 1,400,000, and make a correcting entry for that amount. The auditor would then audit the work done by the officials and reach his/her own conclusions as to the most likely error and upper error limit remaining in the component.

### **10.7.2 Most likely error greater than materiality**

Where MLE exceeds materiality, increasing the materiality amount and increasing the sample size would normally not result in acceptable results. Only two of the options listed above are available to the auditor. They are:

1. Request entity officials to record a correcting entry; and
2. Request entity officials to perform a detailed investigation and then re-audit.

If neither of these options is possible, the auditor should qualify the audit opinion.

### 10.7.3 Unacceptable results for tests of internal control

Assume the auditor selects a sample of 44 supplier invoices and finds 2 internal control deviations – 2 supplier invoices have not been properly approved. This gives a most likely deviation rate of 4.55% (2 divided by 44). The auditor then uses CAATs to arrive at an upper error limit frequency (maximum possible deviation rate of 12.11%. If the upper error limit (tolerable deviation rate) selected is 9%, this is an unacceptable result.

In this case, the auditor normally needs to reduce reliance on the internal control structure. There are three other potential options the auditor can consider:

1. Increase the upper error limit;
2. Increase the sample size; or
3. Request entity officials to perform the “missing” controls, adjust the books for all identified errors, and audit the work performed.

Each is discussed below.

*Increase the upper error limit.* This is equivalent to increasing the materiality amount in the case of monetary errors, and the preceding discussion relating to increasing the materiality amount also applies here to increasing the tolerable deviation rate.

*Increase the sample size.* Assuming the original sample was representative of the population, it is unlikely that increasing the sample size would change the auditor’s estimate of the most likely deviation rate, but could decrease the maximum possible deviation rate.

Increasing the sample size could result in the auditor performing a lot more work and still having unacceptable results. Therefore, the auditor should normally only make use of this option when:

- (a) The most likely deviation rate is significantly less than the upper error limit; and
- (b) The maximum possible deviation rate is only slightly higher than the upper error limit.

In our example, the most likely deviation rate is more than 50% of the tolerable deviation rate, and maximum possible deviation rate is 34.6% higher than the upper error limit. Therefore, increasing the sample size would most likely not lead to acceptable results.

*Request entity officials to perform the “missing” controls, adjust the books for all identified errors, and audit the work performed.*

The deviation rate can be decreased by the amount of any corrections made by entity officials. Should the adjustment be large enough, it may result in the deviation dropping below the tolerable deviation rate.

Entity officials will usually only be prepared to adjust for known errors. Therefore the auditor should re-audit the component and request entity officials to record a correcting entry for the known error. Nevertheless, correction of internal controls does not alter the fact that the transactions throughout the population as a whole are likely to have been subject to inadequate controls prior to the correction resulting in both identified and unidentified errors.

#### 10.7.4 Unacceptable results for analytical procedures

The auditor should perform and evaluate analytical procedures to:

- (a) Determine the threshold amount (the amount above which a difference is considered to be significant);
- (b) Identify significant fluctuations;
- (c) Investigate the significant fluctuations found; and
- (d) Conclude as to whether entity officials have adequately explained all significant fluctuations.

Appendix B provides details of the process.

The threshold amount in (a) is normally set at a percentage of planned precision. Fluctuations are normally considered to be adequately explained when the unexplained portion is less than one-half the threshold amount.

If the amount cannot be adequately explained, or the auditor cannot obtain audit evidence to substantiate the explanation, the auditor must reduce his/her reliance on the analytical procedure. There are, though, two other options, as follows:

- (a) Increase the threshold amount; and/or
- (b) Request entity officials to perform further follow up, adjust the books for all identified errors, and audit the work performed.

Each is discussed in turn.

*Increase the threshold amount.* This could be done by increasing the materiality amount (and hence planned precision) or by increasing the percentage of planned precision used to determine a significant fluctuation. This could result in some unexplained differences becoming immaterial fluctuations, or inadequate explanations now being sufficient.

This option is equivalent to increasing the materiality amount. The arguments for increasing the materiality amount can also be used to increase the threshold amount.

*Request entity officials to perform further follow up, adjust the books for all identified errors, and audit the work performed.* In the case of analytical procedures, this option will rarely work. This is because entity officials should already have attempted to explain all significant fluctuations, and attempted to substantiate their explanations.

#### 10.8 Dealing with acceptable results

Given the impact that a monetary error in one small transaction can have on the most likely error and the upper error limit, it is prudent to discuss all errors and deviations with entity officials no matter how clear cut they are from the auditor's perspective.

The auditor has another reason for discussing all errors with entity officials – getting entity officials to investigate and correct for all monetary errors found by the auditor. This should not only include investigating and correcting the known errors, but also investigating the accuracy of the auditor's most likely error, and making a correction for the determined amount.

This investigation should be done even when the results are acceptable. There are two reasons for this:

1. Entity officials should be interested in having their accounts as accurate as possible. Investigating and correcting for all errors will help to achieve this.
2. Errors that affect a closing balance in one year may affect the related opening balance for the following year. When combined with errors found in the subsequent year, the result may be a material error in the following year's financial statements.

To illustrate point (2) assume:

A Rs. 1,540,150 overstatement error in costs is caused by recording some of the following year's expenditures in the current year. This will result in an understatement of the purchases in the following year.

When doing the following year's audit, the auditor identifies other understatement errors in costs, and estimates the most likely error of these other errors to be Rs. 1,100,000.

In this case, if the Rs. 1,540,150 is not adjusted for in the first year, the most likely understatement error in the second year will be Rs. 2,640,150 (Rs. 1,540,150 plus Rs. 1,100,000). This will likely result in an upper error limit significantly larger than the Rs. 3,000,000 materiality amount.

On the other hand, if the Rs. 1,540,150 had been adjusted for in the first year, the most likely understatement error in the second year would be Rs. 1,100,000, which would probably result in an upper error limit less than the materiality amount.

## 10.9 Documenting the evaluation process

The Standard Audit Working Paper Kit includes a Summary of Unadjusted Differences. This is a series of forms that can be used to:

- Document individual monetary errors and compliance with authority violations;
- Calculate errors in each component and in the financial statements as a whole; and
- Determine the amount of such compliance with authority violations as:
  - Errors in the amount reported for authority available;
  - Errors in the amount reported for excess or saving;
  - Vote over-expended but not so reported; and
  - Spending for purposes not authorised.

The Summary of Unadjusted Differences does not include a component to show the determination of the most likely error and the upper error limit for individual substantive tests of details, or the most likely deviation rate and the maximum possible deviation rate for individual tests of internal control. This is because the easiest way to document these calculations is to print out the error evaluation forms produced by CAATs.

However, to prepare for circumstances where manual calculations are required, the Standard Audit Working Paper Kit contains standard forms that can be used for this purpose.

## 10.10 Evaluating Regularity Audit Results

The auditor does not need an accurate prediction of the extent of irregularities, but wants to know:

- (a) whether the occurrence of irregularities is low enough to be ignored, is sufficiently serious to be brought to the attention of management and Parliament or is so serious that immediate corrective actions are required;
- (b) what factors have contributed to the irregularities, particularly internal control weaknesses that have to be corrected; and
- (c) the impact of the irregularities (these may be (i) minimal where the rules that have been broken are of a preventive nature but no consequences occurred; (ii) serious wastage and misappropriation of funds; and in the most serious case, (iii) loss of Parliamentary control).

Thus the auditor needs to be able to judge how the irregularities occurred and what impact they have had on propriety and the financial and operational performance of the entity.

A series of minor infractions in themselves are not worthy of reporting. However, if a pattern can be detected, individual minor findings may indicate a more serious problem at a higher level. For example many minor miscalculations in payroll may not amount to very much money. The fact that there are errors in the way payroll is calculated can indicate a lack of proper supervision of the payroll section, thus putting the controls over payroll in a situation of high risk. In that situation, the audit finding is not miscalculations of pay but inadequate internal controls over the management of the payroll section.

The audit of individual transactions is not an end in itself. The auditor must identify the underlying causes of the irregularities identified. Determining the causes is not always easy. Often a combination of weaknesses contributes to the breakdown of proper procedures. A high turnover of staff combined with a lack of documented procedures could result in inadequate controls although the lack of one or the other in itself might not be problem. The experience and the judgment of the auditor is critical in getting to the underlying causes of the observed irregularities. Hence, it can be seen that just observing and documenting the irregularities is not the end of the audit process.

Sometimes the audit programme has to be adjusted during or at the end of the audit to follow up on control weaknesses not anticipated at the start of the audit. Further audit work to identify the causes and impact of the irregularities discovered is far more important than increasing the sample size to determine the extent of the weaknesses. In fact, it is management's responsibility to determine the extent of the problem. The auditor's responsibility is to draw management's attention to the need to improve the internal controls.

To identify the impact of the problem, the auditor may decide to take a larger sample to identify the seriousness of the problem. This decision is up to the judgment of the auditor. Senior management within the DAGP may request further work in order that the Auditor-General is able to comment on the extent of the problem discovered. In some cases, other audit teams involved in auditing other parts of the government may be asked to conduct the same type of audit to determine how widespread is the practice of irregularities discovered within one department or entity.

## **10.11 Quality assurance during the evaluation phase**

Considerable professional judgment is required during the evaluation phase. Every step, from the identification of what is a monetary error, a compliance with authority violation, or an internal control deviation, through to the evaluation of the financial statements as a whole and the resolution of unacceptable results, requires this judgment. If the judgment is not appropriate, the auditor could issue an incorrect opinion on the financial statements.

Therefore, it is critical that there is a detailed review and approval of:

- (a) All monetary errors, compliance with authority violations and internal control deviations found, and the assessment of their causes;
- (b) The calculation of the most likely error and the upper error limit for each test;
- (c) The calculation of the most likely error and the upper error limit for each component;
- (d) The calculation of the most likely error and the upper error limit for the financial statements as a whole;
- (e) The assessment of the overall financial statement presentation and the reasonableness of the overall results;
- (f) The assessment of the achieved level of assurance;
- (g) The documentation supporting the discussion of the results of the error evaluation with entity officials;
- (h) The follow-up work performed by entity officials; and
- (i) How unacceptable results were dealt with.

Given the importance of this phase, the Director or Director General responsible for the audit should perform this review and approval.