Where an FEC is unrealised during a year of assessment, section 24I dictates that the foreign exchange gain or loss is calculated by multiplying the FEC by the difference between the ruling exchange rate on transaction date and the ruling exchange rate on translation date. The ruling exchange rate on transaction date will be the forward rate per the FEC contract entered into. The ruling exchange rate on translation date will be the market-related forward rate available for the remaining period of such FEC or the forward rate in respect of an FEC which is an affected contract.

The legislation does permit an alternate rate to any of the mentioned rates, subject to permission of the Commissioner if such alternate rate is used for accounting purposes in terms of generally accepted accounting practice.

In all likelihood, companies would chose to enter into FECs to hedge against foreign exchange risk arising from debt taken over a period longer than a year as the increased term of the foreign debt gives rise to an increased risk. A concomitant result of this would give rise to translation foreign exchange gains or losses in the tax computations of these companies. Where these companies' FEC's are unaffected contracts, determining a market-related forward rate available for the remaining period of such FEC, to calculate the translated foreign exchange gains or losses, will be critical.

The term market-related forward rate available for the remaining period of an FEC is not defined in the Act. Practice Note 4 issued by the South African Revenue Service (SARS) explains this rate to be the rate at which another FEC with similar terms is offered by the authorised foreign exchange dealer used by the taxpayer on translation date.

A brief look into the factors that influence FEC rates would highlight that attempting to determine a market-related forward rate can be complex and involves elements of subjectivity.

One such factor is the strength or weakness of the currency of a country. When looking at what factors influence the strength or weakness of a country's currency, the balance of payments situation tend to be a key contributing factor to the short-term movements of the exchange rate (Fourie, 1999 (p.223)).

A surplus on the overall balance of payments would indicate a demand for the local currency which would in turn lead to strengthening of the currency. An overall deficit on the balance of payments would result in the opposite effect.

The balance of payments is, in turn, influenced by factors like economic growth, rising interest rates, and high inflation.

A rapidly growing economy would create a higher demand for imports that would lead to a deterioration of the trade balance, however, this could be offset by foreign capital security or direct investments.

High interest rates would attract more capital investments to generate higher return on investments.

High inflation makes a country less competitive internationally and tends to result in higher imports and a weaker currency.

Other non-economic factors can also influence a country's trade balance. Factors like the political stability of a country can either attract or dissuade foreign capital inflows or alternately more technical factors like regulations or mandates of central banks could create an artificial demand for local currency.

Foreign exchange rates impact, either directly or indirectly, the FEC's entered into by taxpayers. The aforementioned factors could differ from country to country substantially, creating issues for taxpayers to find FEC's with realistic, similar terms to determine an appropriate market- related forward rate.

Chapter 4 : Factors affecting forward rates of foreign exchange contracts

A forward rate is obtained by adding a premium to, or subtracting a discount from, the spot rate (Fourie, 1999 (p.229)). A forward premium or discount is obtained by an analysis of the difference on interest rates between the two countries involved in the FEC transaction. This is commonly referred to as the interest differential.

If it was assumed that the interest rate in South Africa is 8% and the interest rate in London is 6%, the interest rate differential is 2%.This differential will be translated into the forward discount. The South African rand is at a discount against the British pound because of the higher interest. This is best illustrated by a simple example.

Company A, a South African resident company, imports clothes from China. Payment for the clothes will be made in USD. On 21 July Company A contacts Bank X and requests a rate to purchase $4 million dollars on 3 September. Company A wishes to purchase these dollars as cheaply as possible and minimise the foreign exchange currency risk.

Bank X gives Company A a rate of 4,6241. This is based on a spot rate of 4.5700 and 541 forward points.

USD/ZAR	4,5700
Forward premium	0,0541
Forward rate	**4,6241**

Company A has now eliminated all currency risk and is contracted to a fixed exchange rate. The question which needs to be asked is what would be the effect of Company A purchasing $4 million dollars today and placing this on deposit.

Company A can place the borrowed dollars on deposit for 42 days at 5,5625%. The interest rate on the rands borrowed to purchase the dollars is 16%. The amount Company A would receive on 3 September is:

$$\$4\ 000\ 000 + (42/360 \times 5{,}5625\% \times 4\ 000\ 000) = \$4\ 025\ 958{,}33$$

The amount of rands that would have to be paid back is:

$$R18\ 280\ 000 + (42/365 \times 16\% \times 18\ 280\ 000) = R18\ 616\ 552{,}33$$

If the rand amount is divided by the dollar amount, the forward rate obtained is:

$$18\ 616\ 552{,}33/4\ 025\ 958{,}33 = \mathbf{4{,}6241}$$

This rate can be seen as the same rate given by Bank X to Company A. The bank takes over the task of borrowing and lending funds and translates this into the forward points to the customer.

The forward points can also be seen as a function of the interest rate differential. The following general formula applies:

$$\text{Forward points} = \left\{\frac{1+ (days \div 360 \times iCurrency \div 100)}{1+days \div 360 \times iUS \div 100)} - 1\right\} \times spot$$

(Note: Use 365 days for Rand, British Pound, Euro, New Zealand Dollar and Australian Dollar)

If the formula is now applied to the example of Company A:

Spot	= 4,5700
US deposit rate (42 day)	= 5,5625%
SA borrowing rate (42 day)	= 16%

$$\text{Forward points} = \left\{\frac{1+ (42 \div 360 \times 16 \div 100)}{1+(42 \div 360 \times 5{,}5625 \div 100)} - 1\right\} \times 4{,}5700$$

$$= 0{,}0541$$

The forward rate is 4,6241 (4,5700 + 541 points), which is the same rate that Bank X gives to Company A. Whilst the above formula highlights that forward points are a function of interest rate differentials, the other factor in the formula is time. The duration of an FEC will also impact the forward points. This general formula

might not always agree with the actual rate quoted by a bank to a taxpayer as the forward points are also influenced by demand and supply as well as a number other factors (Fourie, 1999 (p.232))

An additional factor that will influence the forward rate quoted to a taxpayer is credit risk. In the event of a customer entering into an FEC with a bank to take delivery of an agreed quantity of forex at an agreed exchange rate, and being unable to honour the contract, the bank might find itself in a position in which it suffers losses. The bank will want to prevent this and a means of achieving this will be performing a credit risk assessment of the customer it is dealing with prior to quoting a forward rate for a FEC (Fourie, 1999 (pp.238-239))

Depending on the outcome of the credit risk assessment of the customer, the forward rate quoted by the bank might be adjusted either upwards or downwards to mitigate against possible risk to the bank.

Banks are not interested in forward rates but in interest rate differentials as these would impact on the forward rates that banks quote to their customers. In a free market, the forward points between two currencies always tends to be equal to the interest rate differential. Therefore, the determinant in determining forward rates is interest rates (Fourie, 1999 (p.239)).

In many countries, interest rates are artificially driven by measures taken by the domestic regulatory bodies to achieve specific outcomes. The regulations and restrictions implemented by these bodies cause domestic interest rates not to be reflective of true market conditions.

For example, that where a country is experiencing high capital inflows, the country would create barriers to prevent these inflows which have resulted in artificially high domestic interest rates. Where a country suffers from unusually high capital outflows, the country creates barriers for these outflows which result in artificially lower domestic interest rates (Fourie, 1999 (p.240)).

These barriers are, in most cases, affected by a country's political and monetary policies or agendas. This situation creates artificial interest rates and will drive the forward rates that will be quoted by banks to customers.

The above analysis shows that forward rates are determined by factors such as the difference in interest rates between countries which can be artificially adjusted by the domestic market; time or the duration of an FEC; the credit rating that a bank will attach to a customer; as well as other political and socio-economic factors.

When taking the above factors into consideration, the variables used to determine forward rates of FEC's could vary significantly from FEC to FEC, as country fiscal policies and socio economic agendas vary. This creates complexities for taxpayers attempting to meet the requirements of Practice Note 4 which requires taxpayers to utilise forward rates of FEC's with similar terms.

This complexity additionally creates room for subjectivity which creates risk for revenue authorities through potential abuse by taxpayers as well as risks for taxpayers through a lack a certainty when interpreting existing legislation and its correct application.

Chapter 5: The use of the alternate rate

The definition of *"ruling exchange rate"* found in Section 24I of the Act permits the use of an alternate rate that may be used by a taxpayer, instead of any other rate prescribed in the definition of *"ruling exchange rate"*, for the purposes of calculating an exchange difference. The conditions set out in Practice Note 4 for the use of this rate are as follows:

- the rate is determined and applied in terms of generally accepted accounting practice;
- the taxpayer applies the rate for accounting purposes and
- the basis upon which such rate is determined is approved by the Commissioner.

These requirements suggest that the intention of the legislature in adding the permitted use of an alternate rate, used for accounting purposes, is to align the tax and accounting treatment of FEC's in order to simplify a complex area for taxpayers.

In the event that taxpayers want to utilise an alternate rate, meeting the first two requirements set out above would be fairly easy for the majority of multinational corporations as these corporations would be required to prepare annual financial statements that would be based on IFRS. IFRS's require companies to calculate the exchange gains and losses for FEC's that are in place at their financial year-end reporting date, using an exchange rate that will be obtained from a regulated financial institution. This exchange rate will then be utilised to calculate the foreign exchange gains and losses to be recognised in the company's annual financial statements. In the event that a taxpayer adheres to the above mentioned process, it would result in taxpayers meeting the first two requirements set out in Practice Note 4 as they would have obtained an exchange rate that would have been determined in terms of IFRS, which is generally accepted accounting practice in South Africa, and the taxpayer having obtained an exchange rate that was used for accounting purposes.

The third requirement for the use of an alternate rate would entail the taxpayer having an understanding of the basis used to determine an exchange rate that would have been applied and determined in terms of generally accepted accounting practice and, in turn, being able to articulate this to the Commissioner, in the hope of achieving approval for the use of an alternate rate. A closer examination into IFRS which provides the necessary guidance to companies on how to determine an appropriate exchange rate when calculating gains and losses on FEC's is performed below.

5.1 Fair value measurement

IFRS defines a financial instrument as "*any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity*" (PricewaterhouseCoopers, 2011 (p.1002)). An FEC entered into by a company would fall into the definition of a financial instrument per IFRS.

The structure followed by IFRS in relation to financial instruments is such that financial instruments will need to be firstly classified into a specific category of financial instruments and, once classified, will follow specific measurement criteria pertaining to that category. The specific categories of financial instruments identified in IFRS are financial assets, financial liabilities and equity instruments from the issuer's perspective.

IFRS further defines a financial asset as any asset that is (PricewaterhouseCoopers, 2011 (pp.1004 -1005)):

- Cash.
- An equity instrument of another entity.
- A contractual right:
- to receive cash or another financial asset from one entity or
- to exchange financial assets or financial liabilities with another entity under conditions that are potentially favourable to the entity.
- A contract that will or may be settled in the entity's own equity instruments and is:
- a non-derivative for which the entity is or may be obliged to receive a variable number of the entity's own equity instruments or
- a derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments.

A financial liability is any liability that is (PricewaterhouseCoopers, 2011(pp.1004-1005)):

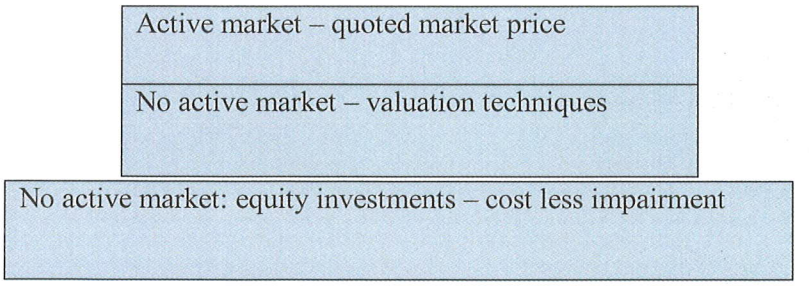
- A contractual obligation:
- to deliver cash or another financial asset to another entity; or
- to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the entity.
- A contract that will or may be settled in the entity's own equity instruments and is:
- a non-derivative for which the entity is or may be obliged to deliver a variable number of the enity's own equity instruments or
- a derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments.

An equity contract is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities.

IFRS identifies a further specific category of financial instruments which are derivatives. Derivatives are financial instruments that derive their value from an underlying price or index, which could be for example, an interest rate, a foreign exchange rate or commodity price. Their primary purpose is to create rights and obligations that have the effect of transferring between the parties to the instrument, one or more of the financial risks inherent in an underlying primary instrument. A derivative gives one party a contractual right to exchange financial assets or financial liabilities with another party under conditions that are potentially favourable or contractual obligation to exchange financial assets or financial liabilities that are potentially unfavourable (PricewaterhouseCoopers, 2011(p.4009)).

When applying the above definitions and classification found in IFRS to that of the definition of an FEC found in section 24I, we can conclude that an FEC for IFRS purposes is a derivative financial instrument that could be classified as either a financial asset or financial liability by virtue of the contractual agreement entered into by the taxpayer to exchange an amount of currency.

The International Accounting Standards Board believes that fair value is the most relevant measure for financial instruments and is the only relevant measure for derivative assets and liabilities. As a result, International Accounting Standard (IAS) 39 gives entities the option to measure all financial assets and liabilities that meet certain criteria at fair value. The importance of fair value in the measurement process arises because it is a market-based notion that is unaffected by the history of the asset or liability, the specific entity that holds the asset or the liability and the future use of the asset or the liability. Thus, it represents an unbiased measure that is consistent from year to year within an entity and between entities (PricewaterhouseCoopers, 2011 (pp.9041-9042)). Consistent with other financial reporting standards, IAS 39 defines fair value as "*the amount for which an asset could be exchanged, or a liability settled, between knowledgeable willing parties in an arm's length transaction*". Willing parties are presumed to be market-place participants representing unrelated buyers and sellers that are knowledgeable, having a common level of understanding about factors relevant to the asset or liability and the transaction and willing and able to transact in the same market(s) having the legal and financial ability to do so (PricewaterhouseCoopers, 2011 (p.9042)). There is a general presumption that fair value can be reliably measured for all financial instruments. Nonetheless, the measurement process can be quite complex and gives rise to numerous issues. It is not surprising, therefore, that IAS 39 provides a significant amount of guidance on how to determine fair values. In looking for a reliable measure of fair value, the standard provides a hierarchy for determining an instrument's fair value as shown below (PricewaterhouseCoopers, 2011 (p.9043)):



As can be seen from the above, the hierarchy gives the highest priority to quoted prices in active markets. Unfortunately, for many of the financial assets for which fair values are required, there may be no active market. In the absence of an active market, fair value is established by using a valuation technique. Such valuation techniques include the use of recent market transactions in similar instruments between knowledgeable, willing parties in an arm's length transaction. Hence, recent market transactions and valuation techniques are given equal prominence in the hierarchy. Only as a last resort, is an entity permitted to use cost and this is limited to unquoted equity instruments whose fair value cannot be measured reliably (PricewaterhouseCoopers, 2011 (p. 9043)).

Quoted prices in an active market

The existence of published price quotations in an active market is the best evidence of fair value and, where available, must be used to measure the financial instrument. A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis (PricewaterhouseCoopers, 2011 (p. 9043)).

Readily available means that the pricing information is currently accessible and regularly available means that transactions occur with sufficient frequency to provide pricing information on an ongoing basis. For example, in an active market, such as the London Stock Exchange, quoted prices that represent actual transactions that are readily and regularly available. What is meant in practice by the phrase "readily available" is a matter of judgement. An absence of transactions for a short period of time, or lower than normal volume of transactions, does not necessarily mean that a market has ceased to be active or that observed transactions are distress sales, nor does it necessarily mean that transactions are motivated other than by normal business considerations. If transactions are occurring frequently enough for an entity to obtain reliable pricing information on an ongoing basis, the market is considered active (PricewaterhouseCoopers, 2011 (pp. 9043-9044)).

It is not necessary for quoted prices to be obtained from regulated markets. Prices can be obtained from other sources although the available information may vary. For example, some industry groups or pricing services

publish price information about certain instruments, while little or no information may be available about prices of other instruments. An entity is not generally required to perform an exhaustive search for price information but should consider any information that is publicly available, or that can be obtained reasonably from brokers, industry groups publications of regulatory agencies or similar sources, such as journals and web sites. It should be noted that these prices may be indicative prices only. It should not be assumed that these prices reflect the price in an active market (PricewaterhouseCoopers, 2011 (pp. 9044-9045)).

Financial instruments may be traded on exchanges, in dealer markets, and in brokered transactions. Closing prices of financial instruments such as stocks, bonds, options, warrants etc, are readily and regularly available on exchange markets and these are used to value instruments identical to those being traded. In an active market where bid and ask prices are more readily and regularly available than closing prices, fair value should be determined using these prices. However, the price that will normally be appropriate for valuation purposes will depend on whether the relevant financial instrument being valued is an asset or a liability, and whether it is already held or to be acquired. The standard specifies the appropriate quoted market prices that should be used as indicated in the table below.

	Instrument held	**Instrument to be acquired**
Financial asset	Bid	Ask
Financial liability	Ask	Bid

The bid price represents the price a dealer is willing to pay for the instrument and, therefore, the price the entity would receive if it sold the asset. The ask price represents the amount at which a dealer is willing to sell the instrument and, therefore, the price that the entity would have to pay to acquire the asset. The ask price (also known as the 'offer' price) will almost always be higher than the bid price (PricewaterhouseCoopers, 2011 (p. 9046)).

Valuation techniques in the absence of an active market

The best evidence of fair value is the quoted price in an active market. If the market for a financial instrument is not active, fair value should be determined using a valuation technique. The objective of using a valuation technique is to establish what the transaction price would have been on the measurement date in an arm's length exchange motivated by normal business considerations. As the objective of the valuation process is to arrive at a reasonable estimate of a financial instrument of a financial instrument's fair value, the technique used should reasonably reflect how the market could be expected to price the instrument. That expectation is likely to be met if the valuation technique makes maximum use of market inputs and relies as little as possible on entity-specific inputs. Also the inputs should reasonably represent market expectations and measures of the risk-return factors inherent in the financial instruments. In other words, an acceptable valuation technique

should incorporate all factors that market participants would consider in setting a price, and be consistent with accepted methodologies for prising financial instruments. A valuation technique should, therefore, reflect how the market could be expected to price the instrument under the conditions that exist at the measurement date. Even where a market is considered to be inactive, the most recent transaction prices should be considered as an input to a valuation model, provided that these are not forced transaction. Current market conditions cannot be ignored (PricewaterhouseCoopers, 2011 (p. 9050)).

Valuation techniques that are well established in financial markets include recent market transactions, reference to a transaction that is substantially the same and discounted cash flows and option pricing models. These techniques are considered below. If there is a valuation technique commonly used by market participants to price the instrument and that technique has been demonstrated to provide reliable estimates of prices obtained in actual market transactions, that technique should be used. For example, well established external proprietary software packages are available for pricing many types of financial options. An entity that holds or writes one of those options would use the model best suited for the type of option held or written. Valuation techniques used to estimate fair value should be applied on a consistent basis. A change in the valuation techniques used is appropriate only if the change results in a more reliable estimate of fair value, for example, as new markets develop or as new and improved valuation techniques become available (PricewaterhouseCoopers, 2011 (p. 9051)).

Inputs to valuation techniques

As explained above, an appropriate valuation technique should incorporate observable market data about the market conditions and other factors that are likely to affect the instrument's fair value. The technique will only be as robust as the inputs used. Market inputs should be determined based on information that is timely, originated from sources independent of the entity and used by market- place participants in making pricing decisions. Examples of market inputs that may be used, directly or indirectly, as a basis for determining a financial instrument's fair value include the following:

- The time value of money (that is interest at the basic or risk-free rate).

Basic interest rates can usually be derived from observable government bond prices and are often quoted in financial publications. These rates typically vary with the expected dates of the projected cash flows along a yield curve of interest rates for different time zones. For practical reasons, an entity may use a well-accepted and readily observable general rate, such as London Interbank Offered Rate (LIBOR) or a swap rate, as the benchmark rate. However, as a benchmark is not a risk-free interest rate, the credit risk adjustment appropriate to the particular financial instrument is determined on the basis of its credit risk in relation to the credit risk in this benchmark rate. In some countries, the central government's bonds may carry a significant credit risk and may not provide a stable benchmark basic interest rate for instruments denominated in that currency. Some

entities in these countries may have a better credit standing and a lower borrowing rate than the central government. In such a case, basic interest rates may be more appropriately determined by reference to interest rates for the highest rated corporate bonds issued in the currency of that jurisdiction.

- Credit risk.

The effect of fair value on credit risk (that is, the premium over the basic interest rate for credit risk) may be derived from observable market prices for traded instruments of different credit quality or from observable market prices for traded instruments of different credit quality or from observable interest rates charged by lenders for loans of various credit ratings.

- Foreign currency exchange prices.

Active currency exchange markets exist for most major currencies, and prices are quoted daily in financial publications.

- Commodity prices.

There are observable market prices for many commodities.

- Equity prices.

Prices of traded equity instruments are readily observable in some markets. Present value based techniques may be used to estimate the current market price of equity instruments for which there are no observable prices.

- Volatility (that is, magnitude of future changes in price of the financial instrument or other item).

Measures of the volatility of actively traded items can normally be reasonably estimated on the basis of historical market data or by using volatilities implied in current market prices.

- Prepayment risk and surrender risk.

This is a risk that the financial instrument may be pre-paid or surrendered earlier than its maturity date. Expected pre-payment patterns for financial assets and expected surrender patterns for financial liabilities can be estimated on the basis of historical data. However, the fair value of a financial liability that can be surrendered by the counterparty cannot be less than the present value of the surrender amount.

- Servicing costs for a financial asset or a financial liability.

Costs of servicing can be estimated using comparisons with current fees charged by other market participants. If the costs of servicing can be estimated using comparisons with current fees charged by other market participants. If the costs of servicing a financial asset or financial liability are significant and other market participants would face comparable costs, the issuer would consider them in determining the fair value of that financial asset or financial liability. It is likely that the fair value at inception of a contractual right to future fees equals the origination costs paid for them, unless future fees and related costs are out of line with market comparables (PricewaterhouseCoopers, 2011 (p. 9051-9052)).

The above looks into some of the criteria used by IFRS to determine the measurement of and rates that should be used to calculate the gains and losses on FEC's. The analysis demonstrates the complexity that this area poses for the taxpayer. It can only be assumed that the South African Revenue authorities have, to a certain