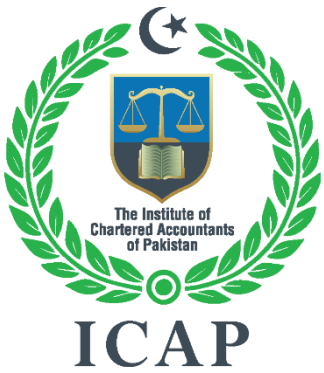


GUIDELINES ON APPLICATION OF IFRS 9 ECL MODEL ON CIRCULAR DEBT

Accounting Standards Board

Contents

PREAMBLE

The Securities and Exchange Commission of Pakistan (SECP), through S.R.O. 229 (1)/ 2019 (dated February 14, 2019) has adopted IFRS 9, effective on reporting periods ending on or after June 30, 2019. However, SECP through S.R.O. 1784 (I)/2024 dated November 04, 2024, has deferred the application of IFRS 9 Expected Credit Loss (ECL) Model on financial assets due or ultimately due from the Government of Pakistan (circular debt), making it applicable from January 01, 2026.

The application of impairment requirement under IFRS 9 i.e. ECL Model requires all entities to establish provisions for expected future credit losses. Under the IFRS 9 ECL approach, entities in circular debt situation need to consider current conditions and reasonable and supportable forward-looking information that is available without undue cost or effort when estimating expected credit losses.

ASB, on SECP's request, has developed the Guidelines on Application of IFRS 9 ECL Model on circular debt by entities in energy supply chain (relating to both power and gas sector). The Accounting Guidance has been developed to facilitate such entities in the implementation and transition to IFRS 9 ECL Model in relation to their circular debt balances. This publication aims to assist entities in energy supply chain in developing understanding and effective implementation of IFRS 9 ECL Model in relation to circular debt balances (as more fully explained in guidance in forthcoming pages of this document). While these guidelines have been principally made to provide guidance in respect of determination of expected credit losses relating to circular debt balances due or ultimately due from government under IFRS 9, the principles laid down in these guidelines may also be used for determining expected credit losses in respect of other debts due from government.

The Accounting Guidance does not intend to prescribe specific methodologies, action plans, systems and models for the application of IFRS 9 by entities in energy supply chain.

It is important to emphasize that the Accounting Guidance has been developed with the objective to facilitate implementation of IFRS 9 ECL Model. It is not a substitute or over-ride for the requirements of IFRS 9 and Companies Act 2017 (including directives of SECP). The views we express in this publication may continue to evolve as implementation continues and additional areas for guidance are identified. We expect to periodically update our guidance to provide the latest implementation insights.

With regards to IFRS 9 application on circular debt balances, ASB would welcome the opportunity to respond to the emerging accounting and reporting application issues raised by the stakeholders.

CIRCULAR DEBT AND RELATED ENTITIES

Definition of circular debt

Circular debt is a situation in which a string of debtors and creditors exist in a fashion such that the net final creditor in the string is indebted to the first creditor. Generally, every member in the chain is both a debtor and a creditor, however, some Energy and Power (E&P) companies may only be debtors.

Circular debt was officially defined by the Economic Coordination Committee (ECC) of the Cabinet in 2014, in the following words:

> *"The circular debt is the amount of cash shortfall within the Central Power Purchasing Agency (CPPA), which it cannot pay to power supply companies. The overdue amount is a result of:*
>
> *a) the difference between the actual cost and the tariff determined by National Electric Power Regulatory Authority (NEPRA) which is the distribution company's loss over and collections under that allowed by NEPRA,*
>
> *b) the delayed or non-payment of subsidies by government, and*
>
> *c) delayed determination and notification of tariffs.*
>
> *It is the government's policy to reduce, limit to a certain amount which would be reduced over time, and eliminate the causes of the circular Debt."* [1]

In Pakistan, the energy sector has faced issue of circular debt for several years which is attributable to the country's power sector and gas sector supply chain.

Country's energy supply chain consists of the following participants:

- Oil & Gas Exploration and Production Companies
- Oil and Gas Marketing Companies, (OMCs)
- Gas Distribution and Supply Companies
- Independent Power Producers (IPPs)
- Power Generation Companies (GENCOs)
- National Transmission and Dispatch Company Limited (NTDCL)
- Central Power Purchasing Agency (Guarantee) Limited (CPPA-G)
- Electricity Distribution Companies (DISCOs)

One entity in this supply chain due to insufficient cash inflows withholds the payments due to suppliers. When it does so, the problem affects other entities in the supply chain, each of which withholds its payments resulting in operational difficulties for entire supply chain and the customers.

[1] National Power Tariff and Subsidy Policy guidelines 2014

SCOPE OF THESE GUIDELINES

It is important to clarify that circular debt comprises of receivable/payable balances between participants of energy sector supply chain (i.e. OMCs, IPPs, GENCO's, NTDCL, CPPA-G, gas distribution & supply companies & DISCOs) directly relating to energy generation and supply. Therefore, any receivable/payable balance is not considered as circular debts if it is:

a) between a participant of energy sector supply chain (i.e. OMCs, IPPs, GENCO's, NTDCL, CPPA-G, gas distribution & supply companies & DISCOs) and a third party not in the energy sector supply chain; and

b) between the participants of energy sector supply chain but not related to generation and supply of gas and electricity.

While these guidelines have been principally made to provide guidance in respect of determination of expected credit losses relating to circular debt balances due or ultimately due from government under IFRS 9, the principles laid down in these guidelines may also be used for determining expected credit losses in respect of other debts due from government.

ENERGY SUPPLY CHAIN ENTITIES

The companies in this supply chain have different legal status, as some are listed whereas others are registered as public unlisted or private companies.

The circular debt situation is of peculiar nature as entities in the energy supply chain are inter-linked with each other in a way that there is limited or no option to change the counter-party to the arrangement. For example, exploration and production companies are primarily restricted to supplying gas to gas distribution & supply companies or IPPs. Similarly, IPPs can supply electricity only to DISCOs through CPPA-G.

Varied arrangements are in force for the trade receivables including unsecured balances and balances guaranteed through sovereign guarantees of Government of Pakistan.

GUIDELINES ON APPLICATION OF IFRS 9 ECL MODEL ON CIRCULAR DEBT

Financial assets are subject to IFRS 9 impairment assessment and determination through ECL model. Inter-corporate circular debt balances in general represents trade receivables resulting from the sale of goods to the entities in the energy supply chain. These trade receivables are financial assets, and therefore fall under the scope of IFRS 9.

Under ECL model the assumption is that all financial assets are exposed to credit losses that may occur over the course of their lives. Therefore, the overarching principle of IFRS 9 is that a company will recognize an allowance for credit losses that results in the financial statements reflecting the net amount expected to be collected from the financial asset.

Well-documented policies and procedures for the computation of ECL on circular debt should be encouraged for transparency and smooth process.

The various aspects of IFRS 9 ECL Model application on circular debt is covered through following questions and answers.

Q 1 - What are the ECL approaches for trade receivables due under circular debt situation?

IFRS 9 prescribes two approaches for calculation of ECL for trade debts i.e. simplified approach and general approach. For trade debts, as per IFRS 9, where there is no significant financing component in the underlying contractual arrangements, it is required to apply simplified approach for calculation of ECL. Where an entity determines that contractual arrangements underlying trade debt do contain a significant financing component, it has a policy choice to apply either 'general approach' or 'simplified approach' for calculation of ECL. (Para 5.5.15a of IFRS 9).

Significant financing component is defined as per paragraph 60 of IFRS 15 as follows:

"If the timing of payments **agreed** to by the parties to the contract (either explicitly or implicitly) provides the customer or the entity with a significant benefit of financing the transfer of goods or services to the customer. In those circumstances, the contract contains a significant financing component."

The starting point for the application of IFRS 9 ECL model for the circular debt would be consideration of whether the arrangement contains significant financing component. The circular debt (receivables) may or may not have significant financing component as per contractual terms. If there is no significant financing component in circular debt receivables [i.e. inter-corporate contractual arrangements for the settlement of these amounts, have not been designed with the objective to provide benefit of financing as agreed credit terms under the contractual terms are few months] then these receivables, in accordance with IFRS 9, would be considered for impairment under the simplified approach for calculation of expected credit loss. However, if an entity has determined that its contractual arrangements contain a significant financing component and chooses to apply general approach for calculation of ECL as provided in IFRS 9 paragraph 5.5.1, it shall apply such approach as per requirements of IFRS 9.

For the purpose of these guidelines, we have used simplified approach for calculation of expected credit loss as we believe it will be applicable for circular debt trade receivables.

Q 2 - Which factors should be considered for calculating impairment of circular debt balances?

IFRS 9 defines "Credit losses" as the difference between all contractual cash flows that are due to an entity in accordance with the contract and all the cash flows that the entity expects to receive, discounted at the original effective interest rate (EIR) (Appendix A to IFRS 9). Expected credit losses are recognized as a loss allowance.

Under IFRS 9 ECL model (impairment of financial assets) the assumption is that financial assets are exposed to credit losses that may occur over the course of their lives. Therefore, the overarching principle of IFRS 9 is that an entity will recognize an allowance for credit losses that results in the financial statements reflecting the net amount expected to be collected from the financial asset (and may involve time value of money).

In accordance with Para 5.5.17 of IFRS 9, the measurement of ECL should reflect:

- A range of unbiased and probability-weighted outcomes.
- The time value of money.
- Reasonable and supportable information based on the consideration of historical events, current conditions and forecasts of future economic conditions.

The objective in IFRS 9 is to determine expected credit losses by considering all reasonable and supportable information, including forward-looking information that is relevant and available without undue cost or effort. Information with these characteristics is used in both the assessment of significant increases in credit risk and in the measurement of expected credit losses. (Para 5.5.4 & B5.5.2 of IFRS-9). The entity should adjust the historical information with reasonable and supportable forward-looking information. The estimates of expected credit losses are made on the basis of information, circumstances and events at the reporting date.

In view of requirements of paragraph 5.5.17 of IFRS 9, the factors relevant for calculating ECL on trade receivables under circular debt situation include:

a) Credit risk associated with counter party;

b) The time value of money in use of appropriate discount rate;

c) Expected recoveries against trade debts including government plans for settlement of circular debt;

d) Expected timelines of receipt of expected amounts based on reasonable and supportable evidence; and

e) The probability allocated to various expected amounts and timelines.

Further, Para 5.5.3 of IFRS 9 requires updating the amount of expected credit losses at each reporting date to reflect changes in credit risk since initial recognition.

It is recognized in the general guidance on ECL in IFRS 9 and also in the Conceptual Framework (Para 2.19 of Conceptual Framework) that measurement uncertainty arises when monetary amounts in financial statements cannot be observed directly and must instead be estimated.

Q 3 - Whether for ECL calculation should an entity pool all circular debt related receivables or consider them separately?

The standard requires an entity to assess whether financial assets share similar risk characteristics and, if so, group such assets in a pool. If similar risk characteristics exist, an entity shall measure expected credit losses on a pool basis, considering the risk associated with the designated pool. If similar risk characteristics do not exist, an entity shall measure the loss allowance on an individual asset basis. The determination of whether a particular financial asset should be included in a pool can change over time. If an asset's risk characteristics change, it should be evaluated to determine whether it is appropriate to continue to keep the asset in its existing pool, or move it to a different pool that may be more consistent with its current risk characteristics. Entities should have processes to evaluate whether assets should continue to be grouped with other assets if risk characteristics change.

Entities should have well-documented policies and procedures for the computation of ECL on circular debt for transparency and smooth process.

Q 4 - Whether an entity is required to calculate ECL for the amounts that are guaranteed by GoP?

Yes. Paragraph B5.5.41 of IFRS 9 requires that an estimate of expected credit losses shall always reflect the possibility that a credit loss occurs and the possibility that no credit loss occurs even if the most likely outcome is no credit loss. Paragraph 5.5.17(a) requires the estimate of expected credit loss that reflects and unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes.

Q 5 - How to calculate ECL for the receivable/amount due that has been guaranteed by the GoP (i.e. sovereign guarantee)?

As a general methodology, the model in IFRS 9 for calculating expected credit losses is based on taking the "probability of default", and multiplying it by the "loss given default" and the amount of "exposure at default" taking into account the time value of money. The mathematical equation to compute ECL would be as follows:

$$Lifetime\ ECL_T = \sum_{t=1}^{T} (Cumulative\ PD_t - Cumulative\ PD_{t-1}) * LGD_t * EAD_t / (1+r)^t$$

Given the nature of the circular debt, and its pattern of past recoveries (erratic in nature) it may not be practical to derive reliable PD estimates from historical information for the circular debt. Further, LGD computations based on estimates of expected realizations from Sovereign guarantees (in a possible default scenario) may also be challenging due to lack of relevant information. Hence, it may be advisable to use a forward looking estimate of future cash flows from the circular debt receivables under various economic scenarios and assign probability to such scenarios for the purposes of calculating expected credit loss. This approach will be aligned to the principles laid down under paragraph 5.5.17 of IFRS 9.

In this situation, the ECL computation would be based on the estimation of what is expected to be received from the obligor or its guarantor in present value term and considering all the reasonable and possible scenarios including default scenario. Historical recovery and loss estimates made by the reporting entity may give an indication of economic loss to be made by the reporting entity. However, care needs to be taken as those historical experiences of economic loss may not

continue in future. Therefore, an appropriate approach would be to firstly, compute estimate of expected loss based on past recovery trends and secondly, develop an estimate of expected loss considering expected future recoveries against circular debt receivables in present value terms (this may be based on the government plans for settlement of circular debt) and take higher of the two to represent the ECL against such receivables unless the reporting entity has sufficient and demonstrable evidence to believe that the future recovery pattern would be favorable than historical experiences. This is under simplified approach for determination of ECL as it aims to recognize life-time expected ECL. An illustration of ECL computation based on various hypothetical scenarios is included in response to Question 16.

While it is desirable to have insights and information from relevant government ministries about their plans for settlement of circular debt balances, it does not preclude the entities in circular debt from using their judgment in applying ECL model and determining expected credit losses in relation to circular debt balances based on reasonable and supportable information about historical events, current conditions and forecasts of future economic conditions.

Q 6 - How to consider default risk of a counterparty when amount due is not guaranteed by the GoP?

The inter-corporate circular debt balances are due from various companies having different credit risk profiles and contractual arrangements. Therefore, risk of non-recovery from counter parties need also to be considered along with time value of money while calculating ECL.

The approach for ECL estimation on overdue receivable which are not covered by Sovereign Guarantee would be same as discussed above, however care needs to be taken in estimating expected recoveries, as in this case the obligor ability to pay the amount due would be different from the case when receivable is covered by sovereign guarantee.

Q 7 - What should be the period for ECL calculation?

Entities must estimate credit losses over the entire period they are exposed to credit risk. For example, if an entity requests payment within 30 days but expects customers to pay within 90 days, the entity should incorporate a reasonable and supportable forecast for a period of 90 days rather than 30 days.

The circular debt receivables, though contractually due at the reporting date (and are reflected as ‘current receivables’), the ECL would involve a determination of the expected timelines of the settlement of these amounts.

IFRS 9 outlines that an entity shall estimate expected credit losses over the contractual term of the financial asset(s) (Paragraph B5.5.38 of IFRS 9). However, in cases where customers routinely make payments after the stated due date or payment terms aren’t specified, an entity will need to determine the period of time over which it will be exposed to credit losses (i.e., the expected life). The expected life of such a receivable should be determined based on historical experience, current conditions (current operating and financial conditions of the counter party etc.), and reasonable and supportable forecasts of future economic conditions (e.g. GDP growth rate, exchange rate, inflation rate, government plans for settlement of circular debt or any publicly available information in this regard).

Q 8 - Which aspects should be considered by entity in terms of relevant available information?

Paragraph B5.5.52 of IFRS 9 requires an entity's estimate of expected credit losses to reflect available information that is relevant to assessing the collectability of cash flows. That information should include historical loss information adjusted for current conditions and forecasts / forward-looking information about future economic conditions that are reasonable and supportable.

In case limited forward-looking information (e.g. GDP growth rate, exchange rate, inflation rate etc.) is available to the entity, it is required to revert to historical loss information as it can no longer develop a reasonable and supportable forecast.

Regarding inter-corporate circular debt there could be a spectrum of forward–looking information available, while it is also possible that limited forward-looking information is available.

In case a spectrum of forward-looking information is available, some of which may be reasonable and supportable and some of which may have little or no supportable basis, determining the information that is relevant and reasonable and supportable and its impact on the assessment of and measurement of ECLs can require a high level of judgement. IFRS 9 acknowledges the difficulty that arises when estimating further into the future and the associated estimation uncertainty involved therein. Instead, an entity should only use information that is reasonably available and supportable to extrapolate information beyond this point.

Q 9 - How timing for the receipt / settlement of circular debt balances could impact in ECL calculation and why time value of money is relevant for calculating ECL for circular debt related receivables?

Paragraph B5.5.38 of IFRS 9 requires reflection of the ECL over the time period the entity is exposed to credit risk. For this ECL model requires the expected amounts and expected timing of receipts/settlements of circular debt receivables. Regarding timing of payments, a credit loss arises even if the entity expects to be paid in full but later than when contractually due.

With regard to circular debt impairment calculations the time value of money must be taken into account when calculating the ECL. The time value of money should be considered for all circular debts, regardless of the expected settlement period where there is exposure to expected shortfall. This expected shortfall would be owing to the reason that the circular debt either does not contain the provision for LPS or LPS have not been received in full and on time. This position would possibly result in the present value of the circular debt being lower than its carrying amount at the reporting date.

Q 10 - Which discount rate would be used for calculating the time value of money of circular debt receivables?

Entities, in circular debt situations, should discount the cash flows that they expect to receive at the effective interest rate determined at initial recognition, or an approximation thereof in order to calculate ECL (Paragraph B5.5.44 of IFRS 9). In this case the ECL should reflect the time value of money by discounting the ECL amount to the reporting date using the effective interest rate (i.e. the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial asset or financial liability to the gross carrying amount of a financial asset or to the amortized cost of a financial liability).

Entities should use either the rate of interest embedded in the contract(s) underlying circular debt balances and if there is no contractual rate of interest then they should use effective imputed borrowing rate utilized in connection with such debt balances.

Discounting using a risk-free rate is inappropriate because it ignores the fact that there is credit risk associated with the circular debt due from a counterparty.

Q 11 - Is it possible for different entities to have different views of the future when establishing their allowances?

Entities may have different views of the future when estimating expected credit losses, forecasts of future economic conditions need to be reasonable and supportable in all cases. Judgment must be used in considering conflicting forecasts about the future. As per paragraph B5.5.54 of IFRS 9, management needs to consider observable market data or external information when developing its estimate. Regardless of whether management takes a contrarian view, it must be able to support its view. An entity may also use internal information to establish its allowance if it can be substantiated more reasonably that internal information is more relevant than external information.

Further, if SECP intends to ensure consistency in the assumptions underlying such estimates, the underlying data from central source (such as potential timings of recoverability of such receivables based on negotiations with the Government) may be provided to develop such assumptions.

Q 12 - IFRS 9 requires ECL application without undue cost and effort, and entities may need guidance on this aspect. What is meant by undue cost or effort?

Paragraph B5.5.49 of IFRS 9 states that for the purpose of this Standard, reasonable and supportable information is one which is reasonably available at the reporting date without undue cost or effort, including information about past events, current conditions and forecasts of future economic conditions. Information that is available for financial reporting purposes is considered to be available without undue cost or effort.

The term undue cost or effort is not defined in the standard. It is an area of management judgment. It is, however, clear from above paragraph of IFRS 9 that information available for financial reporting purposes is considered to be available without undue cost or effort.

Q 13 - Whether to incorporate events and forecasts which occur / become available after reporting date, in ECL calculation?

In respect of whether and how to incorporate events and forecasts, when applying the impairment requirements at the reporting date, that occur: (a) after economic forecasts have been made but before the reporting date (b) between the reporting period end and the date of signing the financial statements, Transition Resource Group (of IASB) has explained that IFRS 9 does not specifically require new information that becomes available after the reporting date to be reflected in the measurement of ECLs at the reporting date. If new information becomes available between the reporting date and the date the financial statements are authorised for issue, an entity needs to apply judgement, based on the specific facts and circumstances, to determine whether it is an adjusting or non–adjusting event in accordance with IAS 10 *Events after the Reporting Period*. Similarly, materiality considerations apply in accordance with IAS 8.

Q 14 - How IFRS 9 ECL Model application would differ from currently applied IAS 39 impairment requirements?

The IFRS 9 impairment requirements eliminate the IAS 39 threshold for the recognition of credit losses, i.e. it is no longer necessary for a credit event to have occurred before credit losses are recognised. Instead, an entity always accounts for ECLs, and updates the loss allowance for changes in these ECLs at each reporting date to reflect changes in credit risk since initial recognition.

Under IAS 39, loss allowances were only recorded for impaired exposures. The impairment requirements under IFRS 9 result in earlier recognition of credit losses, by necessitating a 12-month ECL allowance for all credit exposures not measured at fair value through profit or loss. In addition, there will be a larger allowance for all credit exposures that have significantly deteriorated (as compared to the recognition of incurred losses under IAS 39).

The ECL model is more forward-looking than the IAS 39 impairment model. This is because holders of financial assets are not only required to consider historical information that is adjusted to reflect the effects of current conditions and information that provides objective evidence that financial assets are impaired in relation to incurred losses, but they are now required to consider reasonable and supportable information that includes forecasts of future economic conditions including, where relevant, multiple scenarios, when calculating ECLs, on an individual and collective basis.

Q 15 - How would an entity transit to IFRS 9 when applying ECL model on circular debt balances for the first time?

As per paragraph 7.2.15 of IFRS 9, an entity that adopts the classification and measurement requirements of IFRS 9 shall provide the disclosures set out in paragraphs 42L–42O of IFRS 7 but need not restate prior periods.

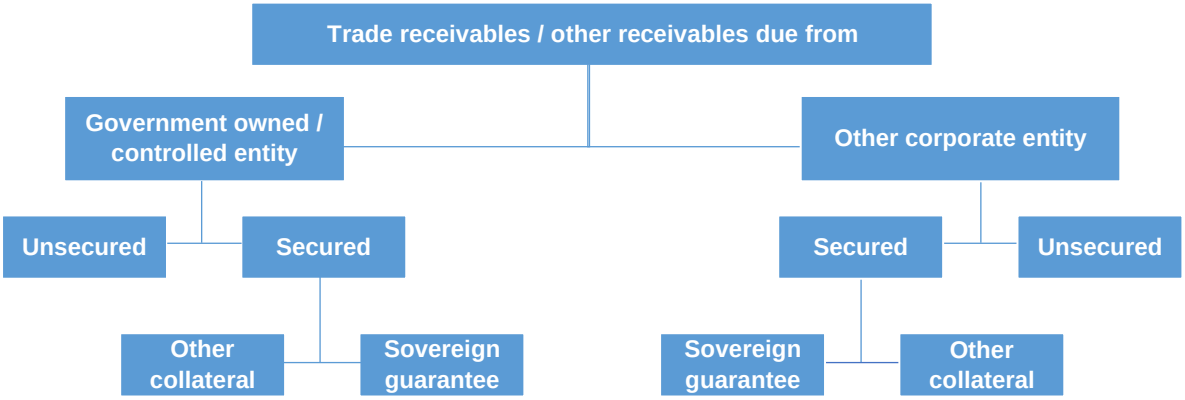
The entity may restate prior periods if, and only if, it is possible without the use of hindsight. If an entity does not restate prior periods, the entity shall recognise any difference between the previous carrying amount and the carrying amount at the beginning of the annual reporting period that includes the date of initial application in the opening retained earnings (or other component of equity, as appropriate) of the annual reporting period that includes the date of initial application.

On transition to IFRS 9 (i.e. first time application of IFRS 9 ECL requirements) the impairment adjustment (if any) may be made, as allowed by paragraph 7.2.15 of IFRS 9, in opening retained earnings (rather than in the current or comparative year profits). Therefore, current year profitability would not be impacted with the transition impairment adjustment.

The cash flows would not be impacted by the impairment adjustment (if any).

Q 16 - What are the scenarios for circular debt and what is involved in calculation of ECL in each case?

IFRS 9 ECL Model would be applicable to all circular debt (receivable balances) and other receivables due or ultimately due from government owned / controlled entities or government (excluding tax related receivables), which are explained as follows:



As per paragraph 5.1.3 of IFRS 9, for the trade receivables with similar risk profile expected to be settled in 12 months of the reporting date, the simplified approach based on prior experience (as explained in IFRS 9) can be used as a practical expedient as financing component, in such cases, would be insignificant.

The important factors in the impairment calculation of circular debt situation would be the estimation about the amount of expected cash inflows, timing of these expected cash inflows and different probabilities / weightages allocated to the same, and the counterparty's risk of default (based on historical trends and the future macro factors such as unemployment, inflation, regulations, law and order, politics).

In case of sovereign guaranteed or highly collateralized financial instrument, the measurement of expected credit losses could be limited to those relating to time value of money. (This assumption should also be supported by historical recoveries from such type of receivables).

In applying the impairment model in IFRS 9, even if expected credit losses are determined to be negligible, it is important that entities are able to demonstrate that they have done enough work to ascertain that outcome. This work includes ensuring sufficient controls are in place that would support an assessment of negligible or nil ECL charge because credit risk factors can change over time.

Based on our understanding of the contractual terms/arrangements (between the companies in the energy supply chain), in respect of inter-corporate circular debt receivables or other receivables due from government or government controlled / owned entities (excluding tax related receivables), the application of IFRS 9 ECL model would be as is provided in the following table. It is assumed that there are no liquidated damages levied on the LPS received with delay. In other words, the LPS itself is a non-interest-bearing receivable.

Features of the circular debt (receivable)	Application of ECL model	What could be the potential ECL (impairment loss)
Scenario A **Circular debt is:** - Receivable in PKR - Secured by sovereign guarantee (i.e. Federal Government of Pakistan) - Expected to be settled with delay of more than 12 months - Carries Late Payment Surcharges (LPS) (interest is charged and received on the outstanding amount of circular debt at a KIBOR plus rate)	Circular debt has a collateral in the form of a sovereign guarantee covering the entire outstanding amount. Delays in the settlement of Circular debt amount are expected, based on forward looking information and historical trends. Importantly, the company is compensated for these delayed settlements of circular debt through legally and historically enforced practice of Late Payment Surcharges (LPS) (charged at KIBOR plus). In past these Late Payment Surcharges (LPS) have been received by the company and Company expects to receive LPS in future as well. In this case the expected cash flows against circular debt include (original amount of circular debt plus LPS) The delayed settlement would require calculation of the present value of expected cash flows. The PV would be generally same compared to carrying value, however, in case of delay in settlement of LPS there could be impairment loss on this component (as delayed settlement of Late Payment Surcharges (LPS) are not compensated with any additional LPS). In this case the central data points for the calculation of impairment loss would be time value of money and different probabilities for different timings of receipt of circular debt.	The possible impairment loss would be reflective of the difference between the carrying value of receivables and the present value of expected cash flows. The impairment loss could only arise when the Late Payment Surcharges (LPS) are either not received in full (which in case of government guarantee is not likely) or not received on time. The present value of expected cash flows would be impacted by the: - Expected amounts (invoice amounts plus LPS) - Expected timelines of receipt of expected amount; and - The probability allocated to various expected amounts and timelines For example, if the greater expectation (probability) is attached to the scenario that the circular debt would be settled within one year, and lesser probability is allocated to its settlement in 2 years' time. In this case the impairment loss would be lesser compared to the scenario where greater probability of settlement is in 2 years' time.

Features of the circular debt (receivable)	Application of ECL model	What could be the potential ECL (impairment loss)
Scenario B Circular debt is - Receivable in PKR - Circular debt is secured by a sovereign guarantee (i.e. Federal Government of Pakistan) - Expected to be settled with delay - Late Payment Surcharges (LPS) for delayed settlement of circular debt balances are not allowed or enforceable	The circular debt has a collateral in the form of a sovereign guarantee. Based on forward looking information and historical trends, delays in the settlement of circular debt amount are expected. Impairment loss under ECL would arise (as there is delay in the payments from the contractual dates) and Company is not compensated for the delayed settlements through the LPS (i.e. interest on outstanding balance of receivable). In economic terms the present value of the cash flows that the Company expects to receive would be less than the contractual cash flows that are due to Company under the contract. In this case the central data points for the calculation of impairment loss would be time value of money and different probabilities for different timings of receipt of circular debt.	The impairment loss would be reflective of the difference between the carrying value of receivables and the present value of expected cash flows. The present value of expected cash flows would be impacted by the: - Expected amounts without any LPS - Expected timelines of receipt of expected amounts; and - The probability allocated to various expected amounts and timelines For example, if the greater expectation (probability) is attached to the scenario that the circular debt would be settled within one year, and lesser probability is allocated to its settlement in 2 years' time. In this case the impairment loss would be lesser compared to the scenario where greater probability of settlement is in 2 years' time.
Scenario C Circular debt is: - Receivable is in PKR - Secured against the guarantee provided by the counterparty or another third party or there is no security (hence unsecured)	The circular debt may have a collateral in the form of a counter party guarantee / security; or the circular debt could be unsecured. Delays in the settlement of circular debt amount are expected, based on forward looking information and historical trends.	The discussion on the impairment loss would be similar to the above (Scenario A) with added point on the assessment of default risk of counter party. The present value of expected cash flows would be impacted by the: - Expected amounts inclusive of LPS;

Features of the circular debt (receivable)	Application of ECL model	What could be the potential ECL (impairment loss)
- Expected to be settled with delay - Carries LPS (interest is charged and received on the outstanding amount of circular debt at a KIBOR plus rate)	In general, the possible impairment loss on circular debt would be similar to the above discussion of scenario A. An additional factor in this scenario would be the credit worthiness and related payment ability of the counterparty compared to a sovereign guarantee, as company as counterparty carries greater risk of recovery. In this case, the important data points would be time value of money, credit risk of country party, and different probabilities for different timings of receipt of circular debt.	- Expected timelines of receipt of expected amounts; - The probability allocated to various expected amounts and timelines of their receipts; and while estimating expected cash flows, risk of actual cash shortfall should also be considered as the counter party has a risk different to the sovereign state. This may be covered by entities through estimation of cash shortfall (in present value terms) expected at the time of settlement of these cash flows.
Scenario D Circular debt is: - Receivable in PKR - Secured against the guarantee provided by the counterparty or another third party or there is no security (hence unsecured) - Does not carry LPS OR Carries LPS but these LPS are not expected to be received	The circular debt may have a collateral in the form of a counter party guarantee/security; or the circular debt could be unsecured. Delays in the settlement of circular debt amount are expected, based on forward looking information and historical trends. Impairment loss under ECL would arise (as there is delay in the settlement of circular debts compared to the contractual timelines and also risk attached to the counter party). Company is not compensated for the delayed settlements through LPS (i.e. interest on outstanding balance of receivable). An additional factor in this scenario would be the credit	The impairment loss would be reflective of the difference between the carrying value of receivables and the present value of expected cash flows. The present value of expected cash flows would be impacted by the: - Expected amounts without any LPS - Expected timelines of receipt of expected amounts; and - The probability allocated to various expected amounts and timelines while estimating expected cash flows, risk of actual cash shortfall should also be considered as the counter party has a risk different to the

Features of the circular debt (receivable)	Application of ECL model	What could be the potential ECL (impairment loss)
	worthiness and related payment ability of the counterparty. Compared to a sovereign guarantee, a company as counterparty carries greater risk of default. In this case, the important data points would be time value of money, credit risk associated with counter party, different probabilities for different timings of receipt of circular debt and credit risk associated with counter party.	sovereign state. This may be covered by entities through estimation of cash shortfall (in present value terms) expected at the time of settlement of these cash flows.
Scenario E **Circular debt is:** - secured / unsecured but expected to be received within 12 months of the balance sheet date - does not carry LPS	The expected settlement of trade or other receivable is in short term (with-in 12 months of the reporting date). The application of ECL model would generally not involve time value of money.	The impairment loss based on (historical trend of impairment updated for forward looking information / future outlook) could be calculated. If there is no significant financing component and no major delay in payments, the discounting will not be required in this case.

Demonstration of practical application of ECL

1. On the practical application of ECL model to circular debt (expected to be settled with delay), a company would be required to estimate reasonably possible loss scenarios and their respective probabilities to arrive at an unbiased and probably-weighted amount that reflects the time value of money. For this purpose, companies need to consider reasonable and supportable information that is available at the reporting date and relates to the past events, current conditions and forecast of future economic conditions.

2. A company having circular debt (receivables) may follow the following steps:

   (a) Consider the contractual terms. more specifically the financing component, security and LPS;

   (b) Build scenarios reflecting the different possibilities (timing and amount) of cash flows;

   (c) Assign probability to each scenario based on best judgment;

   (d) Compute expected cash flows (Present value of cash flows under each scenario x its probability); and

   (e) Compare expected cash flows with the contractually due amount (carrying amount of trade receivable) to determine ECL.

3. The above ECL estimation need to be compared with estimate determined based on historical economic losses suffered by the reporting entity from same obligor or group of obligors and the higher of the two would be considered as ECL against such receivables unless the reporting entity has sufficient and demonstrable evidence to believe that the future recovery pattern would be favorable then historical experiences.

4. It is assumed that full amount of receivables will be recovered as a result of sovereign guarantee therefore such assumptions need to be supported by historical recovery patterns against such receivables.

5. Based on discussion in (2) above, examples are given in the following illustrations:

Illustration A (Secured by Sovereign Guarantee and with LPS)

Contractual terms include:

Carrying value of trade debt plus recorded amount of liquidated damages	200,000
Effective interest rate	13.75%
Trade debt is secured by a sovereign guarantee (i.e. Federal Government of Pakistan)	
Default involves delay in payments and short payment of liquidated damages	
LPS is also available	13.75%

Contractual cash flows (i.e. carrying value of trade debts in the books of account)	PV of expected cash flows (Probability weighted & time value of money)	Impairment loss	Impairment loss as % of trade debts
---------- (Rs. million) ----------			
A	B	C=A-B	D = (C/A) %
200,000	**198,612**	**1,388**	**0.69%**
	(Calculation provided in below table)		

Build scenarios reflecting the different possibilities (timing and amount) of cash flows				Assign probability to each scenario based on best judgment	Compute expected cash flows (Present value of cash flows under each scenario x its probability)	
Expected timing of cash flows	Expected cash flows (Rs. million)	Year 1	Year 2	Probability of expected cash flows	Present value of expected cash flow	Probability weighted present value of expected cash flow
V	W	W'	W''	X	Y	Z =(Y*X)
Trade receivable and liquidated damages are received with a delay of one year	(Billed Trade debts Rs. 200,000 + Liquidated damages of Rs. 27,500)	227,500	-	40%	200,000	80,000
Trade receivable is received with a delay of one year and liquidated damages is received with further delay of one year	(Billed Trade debts Rs. 200,000 + Liquidated damages of Rs. 27,500)	200,000	27,500	30%	197,078	59,123
50% of trade receivable plus liquidated damages is received with a delay of 1 year, remaining 50% of trade receivable plus liquidated damages is received with a delay of 2 years	(Billed Trade debts Rs. 200,000 +Liquidated damages of Rs. 41,2504)	113,750	127,500	25%	198,539	49,635
Trade receivables and liquidated damages are received with a delay of 2 years	(Billed Trade debts Rs. 200,000 +Liquidated damages of Rs. 55,000)	-	255,000	5%	197,078	9,854
				Probability weighted expected cash flow		**198,612**

Illustration B (Secured by Sovereign Guarantee and without LPS)

Contractual terms include:	
Carrying value of trade debt plus recorded amount of liquidated damages	200,000
Effective interest rate (Effective Imputed Borrowing Rate)	15.00%
Trade debt is secured by a sovereign guarantee (i.e. Federal Government of Pakistan)	
Default involves delay in payments and short payment of liquidated damages	
LPS	0.00%

Contractual cash flows (i.e. carrying value of trade debts in the books of account)	**PV of expected cash flows (Probability weighted & time value of money)**	**Impairment loss**	**Impairment loss as % of trade debts**
---------- (Rs. million) ----------			
A	B	C=A-B	D = (C/A) %
200,000	**165,974**	**34,026**	**17.01%**
	(Calculation provided in below table)		

Build scenarios reflecting the different possibilities (timing and amount) of cash flows				**Assign probability to each scenario based on best judgment**	**Compute expected cash flows (Present value of cash flows under each scenario x its probability)**	
Expected timing of cash flows	**Expected cash flows (Rs. million)**	**Year 1**	**Year 2**	**Probability of expected cash flows**	**Present value of expected cash flow**	**Probability weighted present value of expected cash flow**
V	**W**	**W'**	**W''**	**X**	**Y**	**Z =(Y*X)**
Trade receivable is received with a delay of one year	(Billed Trade debts Rs. 200,000 + Nil Liquidated Damages)	200,000	-	50%	173,913	86,957
50% of trade receivable is received with a delay of 1 year, remaining 50% of trade receivable is received with a delay of 2 years	(Billed Trade debts Rs. 200,000 + Nil Liquidated Damages)	100,000	100,000	30%	162,571	48,771
Trade receivables are received with a delay of 2 years	(Billed Trade debts Rs. 200,000 + Nil Liquidated Damages)	-	200,000	20%	151,229	30,246
				Probability weighted expected cash flow		**165,974**

Illustration C (Secured by Counter Party and with LPS)

Contractual terms include:

Carrying value of trade debt	200,000
Effective interest rate	13.75%
Secured against the guarantee provided by the counterparty or another third party or there is no security (hence unsecured)	
Default involves delay in payments and short payment of liquidated damages	
LPS	13.75%

Contractual cash flows (i.e. carrying value of trade debts in the books of account)	PV of expected cash flows (Probability weighted & time value of money)	Impairment loss	Impairment loss as % of trade debts
---------- (Rs. million) ----------			
A	B	C=A-B	D = (C/A) %
200,000	**194,673**	**5,327**	**2.66%**
	(Calculation provided in below table)		

Build scenarios reflecting the different possibilities (timing and amount) of cash flows				Assign probability to each scenario based on best judgment	Compute expected cash flows (Present value of cash flows under each scenario x its probability)	
Expected timing of cash flows	Expected cash flows (Rs. million)	Year 1	Year 2	Probability of expected cash flows	Present value of expected cash flow	Probability weighted present value of expected cash flow
V	W	W'	W''	X	Y	Z =(Y*X)
Trade receivable and liquidated damages are received with a delay of one year	(Billed Trade debts Rs. 200,000 + Liquidated damages of Rs. 27,500)	227,500	-	35%	200,000	70,000
Trade receivable is received with a delay of one year and liquidated damages is received with further delay of one year	(Billed Trade debts Rs. 200,000 + Liquidated damages of Rs. 27,500)	200,000	27,500	25%	197,078	49,269
50% of trade receivable plus liquidated damages is received with a delay of 1 year, remaining 50% of trade receivable plus liquidated damages is received with a delay of 2 years	(Billed Trade debts Rs. 200,000 +Liquidated damages of Rs. 41,250)	113,750	127,500	20%	198,539	39,708
Trade receivables and liquidated damages are received with a delay of 2 years	(Billed Trade debts Rs. 200,000 +Liquidated damages of Rs. 55,000)	-	255,000	5%	197,078	9,854
Trade receivable is received with a delay of 1 year. No liquidated damages are received	(Billed Trade debts Rs. 200,000 + Nil Liquidated damages)	200,000		10%	175,824	17,582
50% of trade receivable is received with a delay of 1 year and remaining 50% is received with a delay of 2 years. No liquidated damages are received	(Billed Trade debts Rs. 200,000 +Nil Liquidated damages)	100,000	100,000	5%	165,197	8,260
				Probability weighted expected cash flow		**194,673**

Illustration D (Secured by Counter Party and without LPS)

Contractual terms include:

Carrying value of trade debt plus recorded amount of liquidated damages	200,000
Effective interest rate (Effective Imputed Borrowing Rate)	15.00%
Secured against the guarantee provided by the counterparty or another third party or there is no security (hence unsecured)	
Default involves delay in payments and short payment of liquidated damages	
LPS	0.00%

Contractual cash flows (i.e. carrying value of trade debts in the books of account)	PV of expected cash flows (Probability weighted & time value of money)	Impairment loss	Impairment loss as % of trade debts
---------- (Rs. million) ----------			
A	B	C=A-B	D = (C/A) %
200,000	**159,168**	**40,832**	**20.42%**
	(Calculation provided in below table)		

Build scenarios reflecting the different possibilities (timing and amount) of cash flows				Assign probability to each scenario based on best judgment	Compute expected cash flows (Present value of cash flows under each scenario x its probability)	
Expected timing of cash flows	Expected cash flows (Rs. million)	Year 1	Year 2	Probability of expected cash flows	Present value of expected cash flow	Probability weighted present value of expected cash flow
V	W	W'	W''	X	Y	Z =(Y*X)
Trade receivable is received with a delay of one year	(Billed Trade debts Rs. 200,000 + Nil Liquidated Damages)	200,000	-	20%	173,913	34,783
50% of trade receivable is received with a delay of 1 year, remaining 50% of trade receivable is received with a delay of 2 years	(Billed Trade debts Rs. 200,000 + Nil Liquidated Damages)	100,000	100,000	30%	162,571	48,771
Trade receivables are received with a delay of 2 years	(Billed Trade debts Rs. 200,000 + Nil Liquidated Damages)	-	200,000	50%	151,229	75,614
			Probability weighted expected cash flow			**159,168**

Note for Scenario E (Expected to be settled within 12 months and without LPS)

As per practical expedient of IFRS 9 trade receivable expected to be settled within one year is deemed to be a trade receivable without significant financing component. Further, the EIR of a trade receivable without a significant financing component is nil as there is no major delay in payments. Hence a discount rate of zero should be applied to the expected cash shortfalls when measuring the ECL of such trade receivables.

Q 17 - Whether review of ECL is required at each reporting date?

In accordance with the requirements of paragraphs 5.5.3 & 5.5.7 of IFRS 9, the ECL impairment estimates arrived at by an entity having circular debt receivables will require re-estimation at each reporting date by considering available historical and forward-looking information. Any necessary adjustments (i.e. charge or credit to current period through income statement), would be required to be recognized in the books of account and financial statements.

Q 18 - What are the disclosure requirements in respect of ECL?

An entity is required to give appropriate qualitative and quantitative disclosures in respect of ECL impairment estimates as per requirements of paragraphs 35H to 35L of IFRS 7.