RSM INSIGHT: APPLYING IFRS 9 *FINANICAL INSTRUMENTS*

by RSM IFRS Advisory Committee

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Contents

IFRS 9: *Financial Instruments*

Applications of the Provision Matrix Practical Expedient in the Calculation of Lifetime Expected Credit Losses

1. Scope

This guidance provides a reminder of the requirements of IFRS 9 with respect to the impairment of trade receivables, lease receivables and contract assets measured using the simplified approach.

However, its main purpose is to provide additional guidance on, and examples of, the use of the provision matrix practical expedient.

2. Reminders

The impairment requirements of IFRS 9 are based on an 'expected loss' model (as opposed to IAS 39 which uses an incurred loss model). There are three approaches to recognising impairment under the expected loss model depending on the type of financial instrument. This guidance covers only the 'simplified approach'.

The simplified approach is required for:

- Trade receivables and contract assets that result from transactions within the scope of IFRS 15 that do not contain a significant financing component (or when an entity applies the IFRS 15.63 practical expedient to such components).

The simplified approach is an accounting policy choice for:

- Trade receivables and contract assets that result from transactions within the scope of IFRS 15 that do contain a significant financing component.
- Lease receivables in the scope of IFRS 16.

An entity must adopt the same policy for all items within a type of asset (e.g. trade receivables) but may apply a different policy to different types of asset.

The application of the simplified approach means that the entity does not calculate 12-month expected credit losses (ECL) and assess when a significant increase in credit risk has occurred. Instead, the simplified approach requires an entity to establish impairment provisions based on the losses it expects to make during the lifetime of the receivable (lifetime ECLs) from the date of its initial recognition.

IFRS 9 requires that expected credit losses are calculated in a way that reflects:

- An unbiased and probability-weighted amount that is determined by evaluating a range of outcomes.
- The time value of money[1]
- Reasonable and supportable information that is available without undue cost at the reporting date about past events, current conditions and forecasts of future economic conditions.

In calculating the lifetime ECL which reflects the above, IFRS 9 allows an entity to use the 'provision matrix' practical expedient.

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[1] The time value of money is not considered further in this guidance because it focuses on the application of the simplified approach and the provision matrix for receivables of a short-term nature where the time value of money would be expected to be immaterial.

3. Provision matrix guidance

When using a provision matrix (or indeed, matrices), an entity estimates lifetime ECLs by considering its historic credit loss experience and applying historic loss rates (adjusted for certain factors) to those period-end receivables that are not already impaired. The provision matrix should consider the impact of ageing to recognise the fact that the rate of loss is likely to increase as receivables become older, as well as various other criteria on the likelihood or rate of loss when estimating lifetime ECLs.

For example, an entity may determine a provision rate of 1% for trade receivables that are current, 2% for those that are less than 30 days past due, 3% if more than 30 days but less than 90 days past due, and so on.

The key steps in developing a provision matrix, or series of matrices, are as follows:

- Consider whether there is diversity in the population of receivables, and where there is, segment those receivables into groupings that reflect the shared credit risk characteristics of the customers in each grouping. A separate provisions matrix should be developed for each grouping.

- Derive the default rates based on own historical credit loss experience over an appropriate time period; and

- Adjust them for relevant current and forward-looking information where those historical rates were incurred under different economic conditions to those expected to exist during the exposure period of the current period-end receivables.

The following factors need to be considered when carrying out these steps:

Groupings

An entity should group receivables when there is evidence that historic credit losses differ significantly for different customer segments. For example, if there is evidence that greater credit losses have been incurred on receivables relating to UK sales compared to sales to the rest of the EU, then the entity should consider the ECL for UK sales and for EU sales separately.

When such diversity exists, separate provision matrices should be applied to different groupings of receivables, determined on the basis of their shared credit risk characteristics.

Examples of criteria that may be used to determine groupings, and possibly sub-groupings, include but are not limited to:

- Geographical location/currency

- Product type

- Customer rating

- Type of customer (e.g. wholesale vs retail or trade sales vs sales to individuals)

- Collateral or trade credit insurance

Time period and historical loss rates

This is another judgemental area as IFRS 9 does not specify the historical time period over which credit loss information should be assessed. An entity may wish to consider the following factors when determining an appropriate time period over which to observe its credit losses. The time period should:

- Be long enough to be useful i.e. the population of sales and sales receipts are sufficiently large to draw conclusions from observable payment patterns and loss information.

- Not include historic loss information that is invalid – i.e. no longer adequately reflects current payment patterns and loss information due to changes in customer mix/individual customer circumstances and economic circumstances among other factors.

- Enable sufficient time for the entity to assess whether a loss has been incurred e.g. it would not be appropriate to include a time period where receivables are not past due, or where there is uncertainty over the recoverability of receivables.

There is no requirement for the time period under assessment to be coterminous with the accounting period or of the same length as the accounting period. For example, an entity with a 31 December 2018 period end may estimate lifetime ECLs based on observed credit losses for the period 1 January 2016 – 30 June 2018.

Where an entity does not have sufficient historical information on which to make this assessment (e.g. it is a new entity or entering a new market) it may need to base its assessment on available market data such as industry loss rates adjusted to reflect conditions or factors specific to the entity.

Current and forward-looking information

Historical loss rates may need to be adjusted to reflect current and forward-looking information. Without such adjustments, historically observed losses may not provide a reasonable estimate of lifetime ECLs when changes are expected in economic indicators, the regulatory and technological environment or industry conditions which may affect the ability of customers to settle their period-end receivables. For example, if historical loss rates were calculated from prior year data but by the reporting date economic conditions are improving, then customers may be in a better position than historically to settle their accounts and thus future credit losses may be expected to reduce.

Information about current conditions and forecast economic conditions must be reasonable and supportable, and available without undue cost or effort.

Simple linear relationships between economic variables and credit losses (eg a simple correlation between unemployment rates and credit losses for a customer grouping comprising retail customers) may be fairly easy to incorporate into the adjusted loss rate.

In such a scenario, an entity should be able to:

- demonstrate that unemployment rates are a relevant factor i.e. that historically its credit losses have moved in line with unemployment and explain why this is the case;

- provide data that shows what is expected to happen to future unemployment rates e.g. unemployment is expected to rise by 1%;

- demonstrate what happened to its credit losses last time there was a material change in unemployment e.g. they increased by 5% when unemployment rose by 1%; and

- adjust the historical default rates accordingly.

Non-linear relationships or relationships incorporating multiple variables may require analysis using more sophisticated modelling techniques.

> Key factor – Historical loss rates may need to be adjusted for current and forward-looking information. This may require significant judgement, and the provision of reasonable and supportable data may be difficult for some entities, although any principal risks and uncertainties that they have identified which may impact their customers' ability to pay may be pertinent.

Calculation of loss rates

Example calculations are set out in the accompanying appendices. The different examples illustrate separately, for the same client, the impact of grouping customers by reference to credit risk factors and adjusting loss rates for current and forward-looking information. However, any calculations in practice will require both the impact of groupings and current and forward-looking information to be considered.

In overview, the calculations are performed for each grouping as follows:

The entity selects a period over which to assess credit losses and determines the total sales made during that period.

The entity then determines the timing of receipts made against these sales and any unrecovered amounts (losses). The timings of receipts should be analysed using the same time 'buckets' that are used in the ageing analysis of period-end receivables.

The loss rates for each time bucket are calculated by assessing the proportion of each time bucket that was ultimately unrecovered, and then adjusted for current or forward-looking market information, if appropriate. Note - the observed historical loss rates must be determined separately for each time bucket. It is not appropriate to simply determine a single 'average' loss rate over the time period (ie total credit loss divided by total credit sales in the period), because loss rates are likely to be higher for older receivables.

The loss rates are then applied to period-end receivables, with the appropriate loss rate applied to each time bucket. The total ECL is the sum of the expected losses in each time bucket.

Observed historical loss rates should be updated at each reporting date.

> The calculation of loss rates is not prescribed by IFRS 9, therefore other methods may be acceptable.
>
> Key factor – Separate default rates should be applied to each time bucket. Those default rates should be expected to increase as the receivables become older.

Appendix 1: Example provision matrix without groupings/adjustments for forward-looking information

An entity (Entity A) has trade receivables of CU 20,000 (without a significant financing component) and no contract assets or lease receivables.

The ageing buckets used by the entity and the ageing profile of the entity's trade receivables at the period-end are as follows:

	Receivables					
	0-30 days	30-60 days	60-90 days	90-120 days	120+ days	Total
CU	9,000	5,000	3,000	2,000	1,000	20,000

Entity A has determined the prior reporting year to be the period which it considers provides the most relevant information on which to base its expectation of credit losses for receivables at the period-end. Sales during this credit loss assessment period totaled CU 100,000. Of this amount CU 2,000 was unrecovered and deemed lost.

Entity A has analysed the timing of receipts in relation to these sales using the same time buckets as it uses for the ageing of receivables at the period-end. The receipt of amounts in each time bucket period, cumulative receipts and amounts outstanding at the end of each time bucket are shown below:

	When the Cash Was Received					
	0-30 days	30-60 days	60-90 days	90-120 days	120+ days	Loss
Cash received	45,000	25,000	18,000	7,000	3,000	n/a
Cumulative receipts	45,000	70,000	88,000	95,000	98,000	n/a
Amount outstanding	55,000	30,000	12,000	5,000	2,000	2,000

The loss rates are calculated by dividing the loss (CU 2,000) by the amount outstanding at the <u>beginning</u> of each time bucket (note - the amount lost features in each of the time buckets). The loss rate represents the proportion of receivables existing at the start of each bucket period which were ultimately unrecovered.

	Receivable at The Beginning of Period				
	0-30 days	30-60 days	60-90 days	90-120 days	120+ days
CU	100,000	55,000	30,000	12,000	5,000
Loss	2,000	2,000	2,000	2,000	2,000
Loss rate	2.00%	3.64%	6.67%	16.67%	40.00%

The loss rate calculated for each time bucket is then applied to period-end trade receivables to calculate the lifetime ECL for each time bucket and in total, rather than using a single average historical loss rate based on a percentage of sales.

	Period-end Trade Receivable					
	0-30 days	30-60 days	60-90 days	90-120 days	120+ days	Loss
CU	9,000	5,000	3,000	2,000	1,000	20,000
Loss rate	2.00%	3.64%	6.67%	16.67%	40.00%	
Lifetime ECL	180	182	200	333	400	1,295

The total lifetime ECL for period-end trade receivables is CU 1,295.

Appendix 2: Example provision matrix incorporating forward- looking and current information

Entity A has observed a relationship between GDP and credit losses. It estimates that for every 1% increase [decrease] in GDP, unrecoverable trade receivables decrease [increase] by 10%.

Based on macroeconomic data, at the period end Entity A has observed a 1% decrease in GDP compared to the end of the credit loss assessment period. No further GDP increase or decrease is expected for the period in which the receivables will be recovered.

Given the observed historical relationship between GDP and its credit losses, Entity A therefore estimates that, based on similar current and forecast economic conditions, its historical credit losses would have increased by 10% to CU 2,200 instead of CU 2,000.

Entity A recalculates its loss rates taking into account its revised expectations.

	Receivable at The Beginning of Period				
	0-30 days	30-60 days	60-90 days	90-120 days	120+ days
CU	100,000	55,000	30,000	12,000	5,000
Loss	2,200	2,200	2,200	2,200	2,200
Adjusted loss rate	2.20%	4.00%	7.33%	18.33%	44.00%

Entity A then applies these adjusted loss rates to the period-end trade receivables buckets.

	Period-end Trade Receivable					
	0-30 days	30-60 days	60-90 days	90-120 days	120+ days	Loss
CU	9,000	5,000	3,000	2,000	1,000	20,000
Adjusted loss rate	2.20%	4.00%	7.33%	18.33%	44.00%	
Lifetime ECL	198	200	220	367	440	1,425

The total lifetime ECL for period-end trade receivables using adjusted loss rates is CU 1,425.

Note that the total ECL in this example is greater than the total ECL in appendix 1; this is to be expected because Entity A expects its current customers will be negatively affected by worse economic conditions, whereas appendix 1 assumed no change to the economic conditions which existed in the credit loss assessment period.

Appendix 3: Example provision matrix with groupings applied to receivables

Entity A has assessed that receivables arising from sales in the UK and sales in the rest of the EU are subject to different loss patterns.

Of the sales of CU 100,000 in the credit assessment period, Entity A has made sales of CU 60,000 to the UK and CU 40,000 to the rest of the EU. Unrecovered receivables amounted to CU 1,400 for the UK and CU 600 for the rest of the EU (CU 2,000 in total). The receipt of amounts in each time bucket, cumulative receipts and amounts outstanding at the end of each bucket period for each geographic market are shown below:

UK

	When the Cash Was Received					
	0-30 days	30-60 days	60-90 days	90-120 days	120+ days	Loss
Cash received	25,000	15,000	11,200	5,400	2,000	n/a
Cumulative receipts	25,000	40,000	51,200	56,600	58,600	n/a
Amount outstanding	35,000	20,000	8,800	3,400	1,400	1,400

EU

	When the Cash Was Received					
	0-30 days	30-60 days	60-90 days	90-120 days	120+ days	Loss
Cash received	20,000	10,000	6,400	2,000	1,000	n/a
Cumulative receipts	20,000	30,000	36,400	38,400	39,400	n/a
Amount outstanding	20,000	10,000	3,600	1,600	600	600

The loss rates for each market are calculated by dividing the respective loss by the amount outstanding at the beginning of each bucket period.

UK

	Receivable at The Beginning of Period				
	0-30 days	30-60 days	60-90 days	90-120 days	120+ days
CU	60,000	35,000	20,000	8,800	3,400
Loss	1,400	1,400	1,400	1,400	1,400
Loss rate	2.33%	4.00%	7.00%	15.91%	41.18%

EU

	Receivable at The Beginning of Period				
	0-30 days	30-60 days	60-90 days	90-120 days	120+ days
CU	40,000	20,000	10,000	3,600	1,600
Loss	600	600	600	600	600
Loss rate	1.50%	3.00%	6.00%	16.67%	37.50%

The respective loss rates are then applied to trade receivables at the period-end. Due to the decrease in the value of the Sterling during the second half of the year, there was an increase in sales to the rest of the EU. Trade receivables total CU 20,000 at the period end, of which CU 8,000 relate to the UK and CU 12,000 to the rest of the EU.

UK

	Period-end Trade Receivable					
	0-30 days	30-60 days	60-90 days	90-120 days	120+ days	Loss
CU	3,000	2,000	1,500	1,000	500	8,000
Adjusted loss rate	2.33%	4.00%	7.00%	15.91%	41.18%	
Lifetime ECL	70	80	105	159	206	620

EU

	Period-end Trade Receivable					
	0-30 days	30-60 days	60-90 days	90-120 days	120+ days	Loss
CU	6,000	3,000	1,500	1,000	500	12,000
Adjusted loss rate	1.50%	3.00%	6.00%	16.67%	37.50%	
Lifetime ECL	90	90	90	167	188	625

The lifetime ECL for both groupings totals CU 1,245.

Note that the total ECL in this example is less than the total ECL in appendix 1; this is to be expected because a greater proportion of trade receivables have arisen from sales to the EU which were identified as carrying a lower overall level of risk of non-recoverability.