FINANCIAL ACCOUNTING AND REPORTING

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TWENTIETH EDITION

Pearson

Financial Accounting and Reporting

(b) The expected value approach

Adopting this alternative approach, we would work out the expected value based on expectations. The bonus on a month has an expected value of (4/12) × 3% + (8/12) × 0% = 1%

The 4/12 above represents the 4 months out of 12 months when they will earn a bonus and the 8/12 represents the 8 out of 12 months in which no bonus is expected.

Under this approach the monthly entry would be:

Dr	Accounts receivable	9,900,000	
Cr	Sales revenue		9,999,000
Dr	Bonus receivable	99,000	

(*Recording expected monthly revenue including anticipated bonuses.*)

Dr/Cr	Accounts receivable	xxxx	
Cr	Bonus receivable	Amounts previously recorded	
Dr/Cr	Revenue	Over-/under-recording of the revenue previously	

(*Adjusting accounts receivable to the right amount when the size of the bonus is known, eliminating bonus receivable, and getting the revenue figure correct.*)

The choice between the two depends on what experience has shown to be the more accurate in predicting the actual outcomes and the degree to which overstatements have been associated with each approach. As revenue can only be recognised when it is 'highly probable', adjustments downward would be expected only rarely and are a problem if they are significant for the particular company.

Treatment if payment is deferred

In a contract in which payment is not immediate on the performance of the obligation but is deferred then there is an implied financing element and the time value of money may have to be considered.

When the interest element may be ignored

If the timing of the delivery of the service is not specified in the contract but is instead determined by the customer, then there is not a definite financing period, so it can be ignored. Also, if the total contract covers less than one year, or the gap between payment and performance is less than one year, then the standard allows the interest element to be ignored as a practical expedient.

When the interest element must be accounted for

The determination of an interest element assumes there are (a) pre-established times for delivery of the service and (b) payment at an agreed price. If the time value of money is relevant then the issues to consider include:

(a) the difference between the cash price (i.e. the price that would have been charged if the payment coincided with the performance of the obligation or occurred in accordance with normal industry terms) and the contract price;

(b) the interest rate in the contract; and

(c) the current interest rate in the market.

If interest is recognised then it is shown separately from other revenue in the statement of comprehensive income.

Accounting treatment illustrated

Let us assume that Heavy Goods plc entered into a contract for the sale of 10 coal trucks, at a cost of £242,000 each, which provided for deferred payment two years later. If the terms were payment on delivery, the contract price would have been £200,000 for a similar vehicle.

This would imply that each truck sold included interest of £42,000 which is at a compound interest rate of 10% per annum. If the market rate is also 10% p.a. then the recording would be:

Year one

Dr	Accounts receivable	2,420,000	
Cr	Sales revenue		2,000,000
Cr	Interest		200,000
Cr	Deferred interest		220,000

(*Being the recording of the sale of 10 coal trucks and receiving 10% interest for one year.*)

Year two

Dr	Deferred interest	220,000	
Cr	Interest		220,000

(*Being interest on 2,200,000 at 10% for year two.*)

Dr	Bank	2,420,000	
Cr	Accounts receivable		2,420,000

(*Being settlement of the account.*)

However, if the market interest rate was more than 10%, that would imply that the sale price was cheaper than competitors' prices or the interest rate was discounted or both were discounted. Such cases will be discussed in the next section.

In the example above the situation is that cash receipts are deferred. The same principle applies to payments received in advance from customers. If the timing between the receipt of cash and the satisfaction of the performance obligation was significant (typically more than one year) interest cost would need to be recognised by the seller.

9.4.4 Allocate the transaction price to the separate performance obligations in the contract (Step d)

Where Step b has identified that there are two or more performance obligations under a contract it is necessary to allocate the total contract consideration (amount) across the individual performance obligations. The standard requires that the revenue is allocated to the different performance obligations pro-rata based on the 'standalone selling prices' of the different goods and services. The method used to determine the standalone selling prices depends on the information available.

The simplest case is where there are readily available market prices for each and every performance obligation. These prices can be used to allocate the total remuneration between the various performance obligations. The highest-quality information is external market prices for identical or very similar items sold to comparable customers in similar circumstances.

In the absence of such high-quality information, the company's own selling prices for items sold individually can be used. Companies should consider what the likely standalone selling price would be to customers and not just, for example, quoted selling prices from a price list. If it is normal practice for a supplier to offer a discount against list price the typical level of discount should be factored into any determination of the standalone selling price.

If the company can only get reliable or consistent information on some of the performance obligations then the residual method can be used. It must be stressed that this residual method is the last resort rather than a desirable approach and would only be applicable to one performance obligation in the bundle supplied.

Suppose a company sells a combination of three performance obligations X, Y and Z for £32. If the market prices of X and Y as independent items are £10 and £15 respectively then the residual of £7 is deemed to be the price of item Z. However, if the company regularly sells bundles of (X + Y) at a discount price of £24, then the residual price would be £8.

Readily available market prices illustrated with Consensus Supplies plc

Let us illustrate the highest ranked approach whereby market prices for all performance obligations are used to allocate the contract price.

Consensus Supplies plc – information on contract

Let us assume that Consensus Supplies plc sells 10 printers on credit at a price of €4,000 each when the manufactured cost was €2,000 each. Let us further assume that Consensus offers its customers a combined contract for €4,800 for each printer which includes the provision of maintenance cover for two years. The cost of manufacture remains the same at €2,000 each and the cost of supplying maintenance is €250 per machine per year.

Let us also assume that customers could purchase separate maintenance cover from other suppliers for two years at a cost of €1,000 per printer.

Consensus Supplies plc – accounting for contract (ignore the financing elements to keep this introductory example simple)

The contract is for two separate performance obligations (with different timing of the services) and so the revenue has to be apportioned between the contracts and then recognised as the individual services are provided. The normal selling prices are:

Supply of printers	€40,000
Supply of maintenance in Year 1	€5,000
Supply of maintenance in Year 2	€5,000
Total services provided	€50,000
Combined price	€48,000

This shows that Consensus is selling at 48,000/50,000 or 96% of the normal price, i.e. 4% below normal selling price. Each component part of the contract is reduced by 4% as follows:

Supply of printers	40,000 × 0.96	€38,400
Supply of maintenance in Year 1	5,000 × 0.96	€4,800
Supply of maintenance in Year 2	5,000 × 0.96	€4,800
Combined price		€48,000

(*This process represents Step d of the requirements, which is to allocate the transaction price to the separate performance obligations in the contract.*)

The entries for a contract made in accordance with the Standard are:

Dr	Trade receivables	€48,000	
Cr	Sales revenue (equipment sales)		€38,400
Cr	Sales revenue (maintenance)		€4,800
Cr	Revenue in advance liability		€4,800

(*Being the recording of a sale and maintenance package.*)

Dr	Cost of goods sold (Equipment)	€20,000	
Dr	Cost of goods sold (Maintenance)	€2,500	
Cr	Inventory		€20,000
Cr	Bank		€2,500

(*Recording costs of providing services and the outlays for wages and materials used for maintenance.*)

Disclosure at end of Year 1

The Standard requires the company to disclose in its annual report the amount and timing of the future revenue secured by existing contracts.

A possible way of disclosing this could be as follows:

Contracts for the supply of maintenance

	Period two	*Period three*
Prepaid amounts	£4,800	XXX
Executory contracts	XXX	XXX

Note, however, that this does not satisfy all the disclosure requirements. See paragraph 110, which says:

> The objective of the disclosure requirements is for an entity to disclose sufficient information to enable users of financial statements to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. To achieve that objective, an entity shall disclose qualitative and quantitative information about all of the following:
>
> **(a)** its contracts with customers . . .
>
> **(b)** the significant judgements, and changes in judgements, made . . .
>
> **(c)** any assets recognised from the costs to obtain or fulfil a contract . . .

Accounting entries in Year 2

These would be:

Dr	Revenue in advance	€4,800	
Cr	Sales revenue (maintenance)		€4,800

(*Transferring revenue in advance to current performance.*)

Dr	Cost of goods sold (maintenance)	€2,500	
Cr	Bank		€2,500

(*Payment for materials and wages.*)

Note that in this chapter we discuss the most common and simplest approach to price allocations. In special circumstances, where specific bundles of performance obligations that

represent some but not all the obligations in the current contract, are regularly sold as a bundle at a discount, then another allocation method may be used. See paragraph 82 of the Standard if you want more details.

9.4.5 Recognise revenue when (or as) the entity satisfies a performance obligation (Step e)

As a performance obligation is transferred to a customer in accordance with the terms of the contract, the revenue is recognised in the books of account. The major principle is that revenue is recognised when control of an asset passes to the customer. The standard recognises that control of an asset can pass to a customer at a point in time or over time.

Recognition of revenue at a point in time

Revenue is recognised at a point in time if control of the good or service passes to the customer at a point in time. Commonly revenue on the sale of goods is recognised at a point in time. When the goods are delivered to the customer, normally the supplier has a right to payment for the goods, assuming they meet the contract specifications and the conditions demanded under the law (e.g. fit for its purpose). The requirement of the standard that the *revenue be recognised when the asset or service is transferred to the customer* is satisfied in that transfer of the goods is assumed to occur when control passes to customers. In the case of goods this is easy to envisage as once the customer receives the goods they are free to use the goods as they want including consuming them, using them in further manufacturing, selling them or just holding them as assets.

In many situations determining the point control of the asset passes is straightforward; however, that is not always the case. For example, if a supplier has provided goods to a customer on a consignment basis, control may only pass when the customer sells those goods on to its customers rather than at the point they are delivered to the customer.

The typical indicators that control has passed to a customer include the customer having (i) the present obligation to pay, (ii) physical procession of the goods, (iii) legal title, (iv) the risks and rewards of ownership and (v) having accepted the goods. None of these factors are conclusive in their own right and therefore judgement is still required to be applied.

Going back to the example of sales on a consignment basis if the customer has a right to return the goods to the supplier with no penalty, and title to the goods only passed whether the customer on-sold, revenue may not be recognised even though the customer had physical procession of the goods.

Recognising revenue over time

IFRS 15 recognises that in some situations companies will transfer control of goods and services to customers over time as opposed to at a single point in time. The standard restricts revenue recognised over time to those where one of the following criteria, detailed in Paragraph 35, are met:

(a) the customer simultaneously receives and consumes the benefits provided by the entity's performance as the entity performs;

(b) the entity's performance creates or enhances an asset (for example, work in progress) that the customer controls as the asset is created or enhanced; or

(c) the entity's performance does not create an asset with an alternative use to the entity and the entity has an enforceable right to payment for performance completed to date.

An example of a business where revenue is recognised over time could be a media company who offered a subscription service to a data site that provides up-to-date news and other information. In this situation the customer of the service would simultaneously receive and consume the benefit of the service as the entity performs.

A further example could be a company that was building an asset specifically for a customer where the customer had designed the asset and had the obligation to pay for the work done to date. This would be on the basis that the asset did not have an alternative use that the entity could put it to.

The decision of whether revenue can be recognised over time is not always straightforward and could depend on the specific circumstances of the arrangement with the customer. The fact that work is performed over a long period for a customer does not automatically mean revenue can be recognised over time. A building company may be constructing housing for customers and some could even place deposits, but if the customers did not control the houses as they were built revenue may only be recognised on completion of the property.

More complex situations

If there are separate performance obligations then the agreed price has to be split; otherwise revenue is recognised for the complete transaction. Decisions may have to be made in complex situations such as when warranties, leases, long-term contracts, reservation of title, sale and repurchase arrangements, licences of intellectual property, equally unperformed contracts and onerous contracts are involved. We will briefly discuss each of these.

Warranties

Let us consider a situation where goods have been supplied under a manufacturer's warranty. This means that the full performance obligation has not been completed in that there are residual obligations in the form of warranties covering faults identified in use.

We have to decide whether the warranty is part of the primary performance obligation to supply the goods in satisfactory conditions or is part of a separate performance obligation.

As the warranty is restricted to making the goods fit for their stated purpose and does not constitute an additional performance obligation, the question of splitting the agreed price into separate components does not arise. The customer clearly has control of the asset and thus the revenue is recognised but the warranty has to be accounted for in accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets.*

Example where there is a manufacturer's warranty

Let us assume that Makem Manufacturing plc has shipped 2 million units to customers during the financial year with selling prices averaging £300 per unit. Over the last ten years the warranties cost an average of £1 per unit with only minor fluctuations from year to year. The accounting entries would be as follows:

Dr	Accounts receivable	600,000,000	
Cr	Sales revenue		600,000,000
(*Revenue recorded at their gross sales value.*)			

Dr	Warranty expenses	2,000,000	
Cr	Liability (Provision) for warranty expenses		2,000,000
(*Covering expected warranty costs.*)			

If the warranty covers more than is normally associated with the supply of goods, and if it represents more than an insignificant amount, then the possibility of the warranty giving rise