HKFRS 15 REVENUE FROM CONTRACTS WITH CUSTOMERS

Learning Objectives

After reading this chapter, you should be able to:

1. Explain the core principle of revenue recognition;
2. Describe the five steps to recognise revenue from contracts with customers;
3. Identify the contracts with the customers;
4. Identify the separate performance obligations in the contract;
5. Identify the transaction price and apply the methods in allocating the transaction price to separate performance obligations;
6. Identify how revenue and contract costs should be recognised when an entity satisfies a performance obligation;
7. Describe the disclosure requirements of revenue transactions.

The *HKICPA's Conceptual Framework for Financial Reporting 2010* defines income as "increases in economic benefits during the accounting period in the form of inflows or enhancements of assets or decreases of liabilities that result in increases in equity, other than those relating to contributions from equity participants".

Revenue is income that arises from ordinary activities of an entity and is generally referred to by various names, such as sales, fees, interest and dividends.

Revenue is the first line and often the largest amount in an entity's statement of profit or loss and other comprehensive income, and so proper revenue recognition is very important.

Hong Kong Financial Reporting Standard (HKFRS) 15 *Revenue from Contracts with Customers* establishes the principles for reporting useful information to users of financial statements about the nature, amount, timing and uncertainty of revenue and cash flows arising from a contract with a customer.

HKFRS 15 supersedes Hong Kong Accounting Standard (HKAS) 11 *Construction Contracts* and HKAS 18 *Revenue*.

In particular, HKFRS 15 requires a new five-step model to recognise revenue from customer contracts.

1. NATURE OF REVENUE

Definition
Revenue *is income arising in the course of an entity's ordinary activities.*

Revenue arises from ordinary activities. This distinguishes revenue from gains. Gains may, or may not, arise in the normal course of operations of an entity. HKAS 16 *Property, Plant and Equipment* and HKAS 38 *Intangible Assets* specifically disallow gains from disposal of property, plant and equipment and intangible assets respectively from being classified as revenue.

Revenue is income and includes only the gross inflow of economic benefits before deducting any expenses, e.g. selling costs.

Revenue does not include amounts collected on behalf of third parties, for example some sales taxes, goods and services taxes or value added taxes.

The same should apply to amounts collected by an agent on behalf of the principal. In an agency relationship, an entity should only recognise the amount of its commission earned as revenue.

2. THE FIVE-STEP REVENUE RECOGNITION MODEL

The core principle is that an entity should recognise revenue to depict the transfer of promised goods or services to customers in an amount that reflects the

consideration to which the entity expects to be entitled in exchange for those goods or services.

The application of the core principle is carried out by a five-step revenue recognition model:

Step 1	Identify the contract with the customer
Step 2	Identify the separate performance obligations in the contract
Step 3	Determine the transaction price
Step 4	Allocate the transaction price to the separate performance obligations in the contract
Step 5	Recognise revenue when the performance obligation is satisfied

Revenue will therefore be recognised by an entity when control of the good or service is transferred to the customer.

2.1 Step 1: Identify the contract with the customer

The first step is to identify whether a contract with a customer exists and meets specified criteria.

Definitions

*A **contract** is an agreement between two or more parties that creates enforceable rights and obligations.*

*A **customer** is a party that has contracted with an entity to obtain goods or services that are an output of the entity's ordinary activities in exchange for consideration.*

The determination of whether a contractual right or obligation is enforceable is a matter of law. Contracts may be in different forms, written, verbal or implied by an entity's prior business practices.

All of the following five criteria must be met before an entity can account for a contract with a customer:

(a) the parties have approved the contract and are committed to perform the relevant performance obligations;
(b) each party's rights regarding the goods or services to be transferred can be identified;
(c) the payment terms for the goods or services can be identified;
(d) the contract has commercial substance (i.e. the risk, timing or amount of the entity's future cash flows is expected to change as a result of the contract); and
(e) it is probable that the entity will collect the consideration to which it will be entitled.

An entity may enter into multiple contracts around the same time and negotiate together with the same customer for the delivery of goods and services. In such a situation, the entity should combine two or more contracts and account for them as if they were a single contract, when one or more of the following criteria are met:

(a) the contracts are negotiated as a package with a single commercial objective;

(b) the amount of consideration in one contract depends on the price or performance of the other contract; or
(c) the promised goods or services in the contracts represent a single performance obligation.

2.2 Step 2: Identify the separate performance obligations in the contract

Step 2 requires an entity to identify the separate performance obligations contained in the contract.

Definition
*A **performance obligation** is a promise in a contract with a customer to transfer to the customer a good or service (or a bundle of goods or services) that is distinct.*

The promise to transfer goods or services is normally explicitly specified in the contract.

Example 1

An entity sells Product "AZ" to a distributor who will then resell it to an end customer. Under the contract with the distributor, the entity promises to provide maintenance services for no additional consideration to the end customer who buys Product "AZ" from the distributor.

In this case, the contract with the customer includes promised goods or services (i.e. Product "AZ" and maintenance services) that are explicitly stated in the contract.

The contract with a customer, however, may also include promises that are implied by an entity's customary business practices, published policies or specific statements if those promises create a valid expectation of the customer that the entity will transfer a good or service to the customer.

There could happen to have several distinct performance obligations in a contract. These performance obligations are accounted for separately if the promised good or service is distinct.

A good or service is 'distinct' if both of the following criteria are satisfied:
(a) the customer can benefit from the good or service on its own or together with other readily available resources; and
(b) the good or service is separately identifiable from other promises in the contract.

A customer can benefit from a good or service if the good or service can be used, consumed, sold to generate economic benefits. A "readily available resource" is either a good or service that is sold separately, or a resource that the customer already has obtained from or will be able to obtain from the entity.

Example 2

Assume facts in Example 1. An entity regularly sells the product "AZ" separately.

In this case, because the entity regularly sells the product "AZ" on a stand-alone basis, the customer can benefit from the product "AZ" on its own. The customer can also benefit from the maintenance services together with a resource that it has already obtained from the entity (i.e. the product "AZ").Therefore, the product "AZ" and the maintenance services are distinct goods or services.

The following factors indicate that two or more promises in the contract to transfer goods or services to a customer are not separately identifiable:

(a) The entity provides a significant service of integrating the goods or services with other goods or services.
(b) One or more of the goods or services significantly modifies or customises one of more of the other goods or services.
(c) The goods or services are highly interdependent or highly interrelated.

Example 3

An entity enters into a contract to supply a licence for a standard "off the shelf" software package to a customer. Under the contract, the entity is required to transfer a licence to use the software, perform installation service and provide technical support for a period of three years. The entity regularly sells the software and technical support separately, and it is not the only entity that could perform the installation software.

In this case, each of the promises in the contract to transfer goods or services is separately identifiable, i.e. the software licence, installation service and technical support are not highly interdependent or highly interrelated, and the software licence would not be significantly modified or customised if the customer decides to use installation service and technical support services provided by other entities.

Three distinct goods or services are identified:

(1) Software licence
(2) Installation service
(3) Technical support

If a good or service is not distinct, an entity should account for all the goods or services promised in a contract as a single performance obligation.

2.3 Step 3: Determine the transaction price

Definition
*The **transaction price** for a contract with a customer is the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer.*

Revenue is recognised when performance obligations are satisfied up to the amount specified in the contract (i.e. transaction price).

The transaction price may be fixed amounts of consideration, variable amounts, or a combination of fixed or variable amounts.

In determining the transaction price, an entity needs to consider the effects of following:

(a) variable consideration
(b) the existence of a significant financing component in the contract
(c) non-cash consideration
(d) consideration payable to a customer

2.3.1 Variable consideration

Variable consideration can be in various forms, including discounts, rebates, refunds, credits, price concessions, incentives, performance bonuses, penalties, etc. that is variable under the contract. The transaction price may also include contingent consideration, i.e., consideration that will vary if an entity's entitlement to the consideration is contingent on the occurrence or non-occurrence of a future event.

Example 4

An entity enters into a contract with a customer on 1 October 2016 to build an asset for $12 million. The terms of the contract include a penalty of $900,000 if the construction is not completed within three months by the specified completion date of 30 September 2018.

In this case, the transaction price includes a fixed amount of $11,100,000 and a variable amount of $900,000 arising from the penalty.

In estimating the amount of variable consideration, there are two possible methods that can be used:

(a) "Expected value" – the sum of probability-weighted amounts in a range of possible outcomes. This method is more appropriate if an entity has a large number of contracts which have similar characteristics.

(b) "Most likely amount" – the single most likely amount in a range of possible outcomes. This method is more appropriate if a contract has only two possible outcomes, e.g. a performance bonus that will or will not be received.

An entity should select the method that is expected to provide a better prediction of the consideration to which it will be entitled.

Example 5

An entity enters into a contract with a customer on 1 April 2016 to build a property. The specified completion date is 31 March 2019. The promised consideration in the contract (i.e. contract price) is $60 million, but that amount will be increased or reduced depending on the timing of completion of the property. For each day before 31 March 2019 that the property is complete, the promised consideration is increased by $200,000. For each day after 31 March 2019 that the property is incomplete, the promised consideration is reduced by $200,000.

Furthermore, upon completion of the property, a chartered surveyor will inspect the property and assign a rating based on metrics defined in the contract. If the property receives a specified rating, the entity will be entitled to an incentive bonus of $4,000,000.

In this case, the entity selects the method that better predicts each element of variable consideration that it will be entitled.

(a) "Expected value method" to estimate the variable consideration associated with the daily incentive or penalty (i.e. $60 million, plus or minus $200,000 per day). This is appropriate because there is a range of possible outcomes.

(b) "Most likely amount" to estimate the variable consideration associated with the incentive bonus. This is because there are only two possible outcomes; the bonus amount is either $4,000,000 or $0.

An entity should apply the "constraint" on the variable consideration so as to avoid overly optimistic estimates of the amount included in revenue. Hence, variable consideration should only be included where it is highly probable that a significant amount of revenue will not be reversed when the uncertainty associated with the variable consideration is resolved.

2.3.2 The existence of a significant financing component in the contract

The transaction price should reflect the time value of money (if material).

An entity needs to adjust the transaction price if the timing of payments specified in the contract provides the customer or the entity with a significant benefit of financing the transfer of goods or services, i.e. a "significant financing component". A significant financing component in the contract exists when there is a significant timing difference between customer payment and the entity's satisfaction of the performance obligation. Adjustment for a significant financing component is to reflect the cash selling price when an entity transfers the goods or services to the customer.

Factors to consider in assessing whether a contract contains a significant financing component include:

(a) the difference, if any, between the amount of consideration and the cash selling price of the goods or services; and

(b) the combined effect of the expected length of time between the provision of goods or services and the receipt of payment, and the prevailing interest rates in the market.

The discount rate used is the interest rate that the entity would apply to a separate borrowing arrangement at contract inception, i.e. the rate that would reflect the credit characteristics of the party receiving the financing in the contract.

As a practical expedient, adjustment for the effect a significant financing component are not required if the time period between customer payment and the transfer of the goods or services will be one year or less.

Example 6

On 1 January 2016, an entity sells an asset for $4,000,000 under a financing agreement. The agreement provides that the amount will be payable only after two years on 31 December 2017 (with no interest). On the date of sale (i.e. 1 January 2016), the entity transfers control of the asset to the customer.

The transaction price is estimated by discounting the future receipts using a rate that would be applied in a separate borrowing arrangement between the entity and its customer at contract inception. The entity determines the applicable interest rate as 8 per cent.

In this case, there is a "significant financing component" in the contract because of the significant period of time between when the customer pays for the asset and when the entity transfers the asset to the customer, as well as the prevailing market rates of interest.

The present value of the receipts, $4,000,000, discounted at 8 per cent for two years is $3,429,355.

The journal entries to record the sales and recognise interest revenue over the two years are:

1 January 2016

Dr. Trade receivables	*$3,429,355*	
Cr. Sales		*$3,429,355*

To recognise revenue upon transfer of control of the asset to the customer.

31 December 2016

Dr. Trade receivables ($3,429,355 x 8%)	*$274,349*	
Cr. Interest revenue		*$274,349*

To adjust the trade receivables by unwinding of the discount and recognise interest revenue for 2016.

31 December 2017

Dr. Trade receivables ($3,429,355 + $274,349) x 8%	*$296,296*	
Cr. Interest revenue		*$296,296*

To adjust the trade receivables by unwinding of the discount and recognise interest revenue for 2017.

Dr. Cash	*$4,000,000*	
Cr. Trade receivables		*$4,000,000*

To record payment received from the customer.

2.3.3 Non-cash consideration

An entity should measure the non-cash consideration (i.e. consideration in a form other than cash) at fair value.

If the fair value of the non-cash consideration cannot be reasonably measured, the consideration is estimated by using the "stand-alone selling prices" of the goods or services.

> ***Definition***
> *The **stand-alone selling price** of a good or service is the price at which an entity would sell a promised good or service separately to a customer.*

2.3.4 Consideration payable to a customer

Consideration payable to a customer includes cash amounts that an entity pays or expects to pay to a customer, credit or other items (e.g. coupons or vouchers) that can be applied against amounts owed to the entity.

An entity should account for consideration payable to a customer as a reduction of the transaction price.

2.4 Step 4: Allocate the transaction price to the separate performance obligations in the contract

Where a contract contains more than one performance obligation (identified in 2.2 Step 2), an entity should allocate the transaction price to each separate performance obligation. The allocation should be made in proportion to the stand-alone selling price of the goods or services.

The best evidence of a stand-alone selling price is the observable price of a good or service which an entity sells separately in similar circumstances and to similar customers.

When a stand-alone selling price is not directly observable, an entity should estimate the price using a suitable method. Approaches that may be used are:

(a) Adjusted market assessment – estimating the price that a customer would be prepared to pay in the market for those goods or services.
(b) Expected cost plus a margin – estimating the expected costs of satisfying a performance obligation and adding an appropriate margin.
(c) Residual – estimating the price by deducting observable stand-alone selling prices of other goods or services promised in the contract from the total transaction price.

Example 7

Assume facts in Example 3. The contract price is stated at $900,000. The stand-alone selling prices of each component are as follows:

Software licence	$660,000
Installation service	$200,000
Technical support	$340,000

In this case, the transaction price is allocated in proportion to the individual stand-alone selling price of the goods or services as follows:

	$	
Software licence	495,000	($660,000 / $1,200,000) x $900,000
Installation service	150,000	($200,000 / $1,200,000) x $900,000
Technical support	255,000	($340,000 / $1,200,000) x $900,000
	900,000	

A "discount" exists if the sum of the stand-alone selling prices of the goods or services exceeds the promised consideration in a contract. A discount is allocated on a proportionate basis to all of the performance obligations, unless there is observable evidence that the discount relates to only some performance obligations in the contract.

2.5 Step 5: Recognise revenue when the performance obligation is satisfied

Revenue is recognised when a performance obligation is satisfied by transfer of a promised good or service to a customer. The transfer of good or service occurs when the customer obtains control of that good or service. This would occur at a point in time (e.g. when goods are delivered to the customer), or over time.

A performance obligation is satisfied over time if any of the following three criteria is met:

(a) The customer simultaneously receives and consumes the benefits as the entity performs (e.g. routine service such as cleaning).

(b) The entity's performance creates or enhances an asset controlled by the customer.

(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.

2.5.1 Performance obligations satisfied at a point in time

Revenue that is allocated to performance obligations in Step 4 satisfied at a point in time will be recognised when control of the promised good or service has transferred at that point in time.

Indicators for the transfer of control of an asset include the following:

(a) The entity has a present right to payment for the asset.
(b) The entity has transferred legal title of the asset to the customer.
(c) The entity has transferred physical possession of the asset to the customer.
(d) The entity has transferred the significant risks and rewards of ownership of the asset to the customer.
(e) The customer has accepted the asset.

2.5.2 Performance obligations satisfied over time

Where the performance obligation is satisfied over time, the revenue allocated to that performance obligation in Step 4 is recognised over the period the performance obligation is satisfied. An entity should recognise revenue over time by measuring the progress towards complete satisfaction of that performance obligation for each reporting period.

Example 8

An entity enters into a contract to provide data processing services to a customer for two years.

In this case, the performance obligation is satisfied over time because the customer simultaneously receives and consumes the benefits of the entity's performance as and when each transaction is processed.

An entity should recognise revenue for a performance obligation satisfied over time only if the entity can reasonably measure the outcome of that performance obligation.

An entity should apply a single method of measuring progress for each performance obligation satisfied over time consistently to similar performance obligations.

Progress is measured based on either:
(a) Output methods — recognise revenue on the basis of direct measurements of the value to the customer of the goods or services transferred to date. These include surveys of performance completed, work certified, units produced; or
(b) Input methods — recognise revenue on the basis of the entity's inputs to the satisfaction of a performance obligation relative to the total expected inputs required. These include costs incurred, labour hours worked, machine hours used.

Example 9

A contractor enters into a contract to build an asset for a customer on 1 January 2016. The specified completion date is 31 December 2018. At 31 December 2016, total contract revenue is $8 million and estimated total costs to complete the contract are $6 million (of which $3 million incurred for work performed to date). Of the $3 million incurred, however, $0.6 million relates to materials that are to be used in 2017.

The contractor recognises revenue over time and measures the progress towards satisfaction of its performance obligation by using an input method based on costs incurred. The percentage of completion of contract activity is calculated by the proportion of contract costs incurred for the work performed to date bear to the estimated total contract costs.

In this case, the contractor should exclude from an input method the effects of any inputs that do not depict its performance in transferring control of promised goods or services to the customer. The $0.6 million materials bought relate to the work to be performed in future and hence does not contribute to the contractor's progress in satisfying the performance obligation at 31 December 2016.

Percentage of completion of contract activity at 31 December 2016

$$= \frac{(\$3 \text{ million} - \$0.6 \text{ million})}{\$6 \text{ million}}$$

$$= 40\%$$

In 2016, the contractor should recognise contract revenue of $3.2 million ($8 million x 40%) and contract expense of $2.4 million. Contracts costs of $0.6 million incurred for materials bought in advance is recognised as "Inventory".

3. CONTRACTS WHERE PERFORMANCE OBLIGATIONS ARE SATISFIED OVER TIME

A performance obligation satisfied over time that meet the criteria in Step 5 and, where it is entered into more than one accounting period, is often referred as long-term construction contract.

In a construction contract, a contractor generally has an enforceable right for payment that compensate the contractor for performance completed to date. This would be an amount that approximates the selling price of the goods or services transferred to date (e.g. recovery of the costs incurred by a contractor in satisfying the performance obligation plus a reasonable profit margin).

A construction contract lasts for a number of years. The contractor will receive payments from the customer periodically at various stages of the contract activity. The contractor will need to allocate the revenue and contract costs in each of the years in which it performs the construction work. This will require the contractor to determine the percentage of completion of the contract activity at the end of each reporting period and when the outcome of the contract can be measured reliably.

In the statement of financial position, a contractor should recognise the contract with a customer either as a contract asset or a contract liability, depending on the relationship between the entity's performance and the customer's payment. Any unconditional rights to customer's consideration are presented separately as a receivable.

Definitions

*A **contract asset** is an entity's right to consideration in exchange for goods or services that the entity has transferred to a customer when that right is conditional upon on something other than passage of time (e.g. the entity's future performance).*

*A **contract liability** is an entity's obligation to transfer goods or services to a customer for which the entity has received consideration (or the amount is due) from the customer.*

Example 10

A contractor enters into a construction contract on 1 January 2016 for a price of $40 million. The specified completion date is 30 June 2017.

The contractor measures the satisfaction of performance obligation satisfied over time by using an input method. The input method determines the percentage of completion of the contract activity by calculating the proportion of contract costs incurred for the work performed to date bear to the latest estimated total contract costs.

Relevant information at 31 December 2016 is as follows:

	$'m
Costs incurred to date	20
Estimated costs to completion	5
Payments invoiced during the year	17
Payments received during the year	15

Workings:

(1) Estimated profit

	$'m	**$'m**
Contract price		40
Less: Estimated total costs to completion		
Costs incurred to date	20	
Estimated costs to completion	5	(25)
Estimated profit		15

(2) Percentage of completion of contract activity

Percentage of completion at 31 December 2016

$$= \frac{\$20 \text{ million}}{(\$20 \text{ million} + \$5 \text{ million})}$$

$$= 80\%$$

In 2016's statement of profit or loss and other comprehensive income, the contractor should recognise contract revenue of $32 million ($40 million × 80%) and contract expense of $20 million ($25 million x 80%).

Statement of Profit or Loss and Other Comprehensive Income (Extracts)
for the year ended 31 December 2016

	$'m
Contract revenue	32
Contract expense	(20)
Profit recognised	12

The contractor's enforceable right for payment for performance completed to date should approximate the selling price of the contract services completed to date. Selling price would be recovery of the costs incurred by a contractor in satisfying the performance obligation plus a reasonable profit margin. Therefore, contract asset will be stated in the statement of financial position as cost incurred plus profit recognised less payments invoiced.

Statement of Financial Position (Extracts) as at 31 December 2016

	$'m
Current assets	
Contract asset (*Working*)	15
Contract receivables ($17m – $15m)	2

Working:

	$'m
Costs incurred to date	20
Add: Profit recognised	12
	32
Less: Payments invoiced	(17)
Contract asset	15

During the early stages of a contract, an entity may not be able to reasonably measure the outcome of a long-term construction contract. Nevertheless, the entity is confident to recover the costs incurred. In this case, the entity should account for the contract by using the cost-recovery method. This method recognises revenue only to the extent of the costs incurred that are expected to be recoverable. Hence, no profit is recognised.

4. DISCLOSURES

An entity should disclose qualitative and quantitative information about its contracts with customers to enable users of financial statements to understand the nature, amount, timing and uncertainty of revenue and cash flows.

An entity should disclose its significant judgements and changes in the judgements made in applying the requirements to its contracts with customers.

An entity should disclose the following amounts unless those amounts have been presented separately in the statement of profit or loss and other comprehensive income in accordance with other Standards:

(a) Revenue recognised from contracts with customers (disclosed separately from other sources of revenue).
(b) Any impairment losses recognised on any receivables or contract assets arising from the contracts with customers (disclosed separately from impairment losses from other contracts).

In respect of contract balances, an entity should disclose:
(a) The opening and closing balances of receivables, contract assets and contract liabilities.
(b) Revenue recognised in the reporting period that was included in the contract liability balance at the beginning of the period.
(c) Revenue recognised in the reporting period from performance obligations satisfied in previous periods.

An entity should provide information about its performance obligations, including when the entity satisfies its performance obligations, the transaction price and the amounts being allocated to performance obligations.

5. CHAPTER REVIEW

The core principle is that an entity should recognise revenue to depict the transfer of promised goods or services to customers in an amount that reflects the amount of consideration to which the entity expects to be entitled in exchange for those goods or services.

Revenue is recognised when an entity transfers control of the promised good or service to the customer.

Revenue is recognised and measured using the five-step revenue recognition model:

Step 1: Identify the contract
Step 2: Identify separate performance obligations
Step 3: Determine the transaction price
Step 4: Allocate transaction price to performance obligations
Step 5: Recognise revenue when each performance obligation is satisfied

Where performance obligations are satisfied over time, an entity should determine what amounts to be recognised as revenue and contract expense in each reporting period.

MULTIPLE CHOICE QUESTIONS

1. Revenue is defined as:

   A income arising in the course of an entity's ordinary activities.
   B income generated from an entity's sales of goods and rendering of services.
   C increases in economic benefits during the accounting period.
   D increases in economic benefits during the accounting period in the form of inflows or enhancements of assets or decreases of liabilities that result in increases in equity, other than those relating to contributions from equity participants.

2. The five-step revenue recognition model applies to revenue from the contract with a customer. Which of the following is ***NOT*** a valid step in the model?

   A Allocate the transaction price to the separate performance obligations.
   B Determine the transaction price.
   C Recognise revenue when the risks and rewards of ownership of goods or services is transferred to the customer.
   D Identify separate performance obligations

3. Step 1 of the five-step revenue recognition model requires certain criteria to be satisfied in identifying a contract with a customer. Which of the following is ***NOT*** one of these criteria?

   A The rights of each party regarding the goods or services to be transferred must be capable of identification.
   B The payment terms for the goods and services to be transferred can be identified.
   C The entity and the customer have approved the contract and are committed to perform their respective obligations.
   D It is certain that the entity will collect the consideration to which it is entitled in exchange for the goods or services that will be transferred to the customer.

4. Step 3 of the five-step revenue recognition model requires an entity to determine the transaction price. The transaction price may include variable consideration. An entity should estimate the amount of variable consideration by:

   A the lower of the expected value or the most likely amount.
   B the higher of the expected value or the most likely amount.
   C the choice of the expected value or the most likely amount.
   D the expected value or the most likely amount, whichever better predict the consideration to which the entity will be entitled.

5. An entity enters into a contract to construct a plant for a customer. The contract price is $4,000,000 and the specified completion date is 31 December 2016. The contract also provides that the entity would receive an incentive payment of $200,000 if the plant is completed by 31 October 2016. However, the price will be reduced by a penalty of $200,000 if the plant is not completed until after 28 February 2017.

The entity estimates that there is a 10% probability that the plant will be completed by 31 October 2016, an 85% probability that it will be completed during the period 1 November 2016 to 28 February 2017, and a 5% probability that it will not be completed until after 28 February 2017.

The expected value of the transaction price for this contract is:

A $3,820,000.
B $4,000,000.
C $4,010,000.
D $4,100,000.

6. An entity enters into a contract to supply three products, Product A, B and C, to a customer for a price of $81,000. The promise to supply each of these products is identified as a separate performance obligation.

The individual stand-alone selling prices of each product are:

Product A	$20,000
Product B	$30,000
Product C	$40,000

The contract price should be allocated to each separate performance obligation as:

A Product A $18,000, Product B $27,000, and Product C $36,000.
B Product A $20,000, Product B $30,000, and Product C $40,000.
C Product A $27,000, Product B $27,000, and Product C $27,000.
D Product A $30,000, Product B $30,000, and Product C $30,000.

7. To determine whether a customer obtains control of a promised asset and the entity satisfies a performance obligation at a point in time, Step 5 of the five-step revenue recognition model requires the entity to consider the requirements for control.

Which of the following factors indicate the transfer of control?

(i) The customer has legal title of the asset.
(ii) The customer has the significant risks and rewards of ownership of the asset.
(iii) The entity has transferred physical possession of the asset to the customer.
(iv) The entity has a present right to payment for the asset.

A (ii) and (iii)
B (i), (ii) and (iv)
C (i), (iii) and (iv)
D All of the above

8. A performance obligation is satisfied over time if:

A The entity's performance creates or enhances an asset that the customer controls as the asset is created or enhanced.
B The customer does not receive or consume the benefits until the performance obligation is completely satisfied.

C The entity does not have an enforceable right to payment for the performance completed to date.
D The entity's performance creates an asset with an alternative use to the entity.

The following information is required for Questions 9 and 10.

On 1 January 2016, a contractor entered into a contract of $40 million to build a bridge. The specified completion date is 31 December 2019. The contractor's initial estimate of contract costs was $32 million. At 31 December 2016, the costs incurred to date and the estimated costs to complete the project were $8 million and $22 million respectively. The contractor determines the percentage of completion of the contract using the proportion of costs incurred method.

9. The percentage of completion of the contract activity at 31 December 2016 is:

A 20 per cent.
B 25 per cent.
C 26.7 per cent.
D 36.4 per cent.

10. The contractor should recognise profit from the contract for the year ended 31 December 2016 for:

A $2,000,000.
B $2,500,000.
C $2,136,000.
D $2,670,000

SHORT QUESTIONS

1. Included in the sales of Sun Light Ltd ("Sun") for the year ended 31 December 2016 is the cash sale of goods to Moon Ltd ("Moon") of $600,000 made on 1 January 2016. The sale contract includes a call option that gives Sun the right to repurchase these goods on or before 1 January 2017 for $654,000. It is highly likely that Sun will exercise the option and repurchase the goods.

Required:

Explain how the cash sales made to Moon should have been properly accounted for in Sun's financial statements for the year ended 31 December 2016 in accordance with HKFRS 15 *Revenue from Contracts with Customers*.

2. Gen Mobile Ltd ("Gen") enters into a mobile phone contract with a customer on 1 January 2016. Gen provides the customer a contract that comprises a "free" handset and provision of network services (including data downloads, text messaging, etc.) for two years. The contract for network services is $400 per month. Gen also regularly sells the handset and provides other customers network services on a stand-alone basis. The handset has a stand-alone selling price of $5,000.

Required:

Explain how Gen should account for the mobile phone contract with the customer in its financial statements for the year ended 31 December 2016 in accordance with HKFRS 15 *Revenue from Contracts with Customers*.

LONG QUESTIONS

1.

(a) **Answer the following in accordance with HKFRS 15 *Revenue from Contracts with Customers*:**

(i) **Define "contract" and "performance obligations".**

(ii) **Describe the main features of the five-step revenue recognition model.**

(b) Wind Ltd ("Wind") entered into a contract with Blow Ltd ("Blow") to sell an item of machinery on 1 January 2016.

The contract provides for two economic equivalent payment choices:
(a) Blow pays $968,000 on 31 December 2017 and obtains control of the machine.
(b) Blow pays $800,000 on 1 January 2016 when it signs the contract.

Blow chooses to sign the contract on 1 January 2016 and pays $800,000 on that date.

Wind's incremental borrowing rate is 10%.

Required:

Explain how Wind should account for the contract with Blow for the years ended 31 December 2016 and 2017 in accordance with HKFRS 15 *Revenue from Contracts with Customers*,

2. Pan Construction Ltd ("Pan") has entered into a contract to build a bridge at a price of $90 million. The contract begins on 1 January 2016 and the specified completion date is 31 December 2019. The initial estimate of the costs to compete the contract is $80 million.

Costs incurred since 1 January 2016 are as follows:

Up to 31 December 2016	$20 million
Up to 31 December 2017	$54 million

Costs incurred during 2017 included the costs of materials of $4 million for use in 2018.

Due to unexpected further costs of $20 million incurred in 2017, Pan renegotiated the contract price with the customer. However, the customer only agreed to compensate Pan for an increase in the contract price by $6 million.

Payments invoiced by Pan for contract progress during 2016 and 2017 were $25 million and $14 million respectively. The customer fully settled the amount of $25 million by 31 December 2016. However, only $12 million out of $14 million invoiced for 2017 was received by 31 December 2017.

Pan determines contract progress based on the percentage of completion method. The percentage of completion of contract activity is calculated by the proportion of contract costs incurred for the work performed to date bear to the latest estimated total contract costs.

Required:

Prepare, for Pan Construction Ltd, extracts to the statement of profit or loss and other comprehensive income for the years ended 31 December 2016 and 2017, and the statement of financial position as at these dates to report the contract performance.

Answers

MULTIPLE CHOICE QUESTIONS

1. A	2. C	3. D	4. D	5. C	6. A	7. D	8. A	9. C	10. D

SHORT QUESTIONS

1. The "cash sales" to Moon should not be recognised as a sale of goods in the books of Sun. Control of the goods does not transfer to Moon on 31 December 2016 because the call option gives Sun the right to repurchase the asset and it is highly likely that Sun will exercise the right. Therefore, Moon is limited in its ability to direct the use of and obtain benefits from the goods (even though Moon has physical possession of the goods).

   Since Moon does not obtain control of the goods, Sun should account for the transaction as a financing arrangement as it can repurchase the goods for an amount greater than the original selling price of the goods. Therefore, Sun should recognise the cash received $600,000 as a loan (liability). It should also recognise interest expense for $54,000 ($654,000 – $600,000), which increases the liability. The sale of goods that have wrongly been recognised should be reversed and Sun should continue recognise the goods as "Inventory".

2. The handset that is bundled with the network services in the mobile phone contract is capable of being identified as distinct.

   Gen should allocate revenue to the handset because control is transferred upon delivery of the handset to the customer, and the delivery constitutes a separate performance obligation.

   Gen should allocate the entire contract (transaction) price, $9,600 ($400 x 24), to the distinct goods or services (handset and network services) by the proportion calculated as follows:

	$	Proportion
Handset	5,000	34.25%
Network services	9,600	65.75%
	14,600	

Revenue recognised for the year ended 31 December 2016 is:

	$	
Handset	3,288	$9,600 x 34.25%

Network services	3,156	($9,600 – $3,288)/2

LONG QUESTIONS

1.

(a)

(i) A "contract" is an agreement between two or more parties that creates enforceable rights and obligations.

A "performance obligation" is a promise in a contract with a customer to transfer to the customer a good or service (or a bundle of goods or services) that is distinct.

(ii) An entity should recognise revenue from contracts with customers by applying the five steps as follows:

Step 1: Identify the contract with a customer
A contract with a customer exists only when:
(1) The parties have approved the contract and are committed to perform the obligations;
(2) Each party's rights regarding the goods or services to be transferred can be identified;
(3) The payment terms for the goods or services can be identified;
(4) The contract has commercial substance; and
(5) It is probable that the entity will collect the consideration to which it will be entitled.

Step 2: Identify the performance obligations in the contract
When the promises goods or services in a contract are distinct, an entity should account for the performance obligations (those promises) separately. A good or service is distinct if the customer can benefit from the good or service on its own or in combination with other readily available resources and the good or service is separately identifiable from other promises in the contract.

Step 3: Determine the transaction price
The transaction price should reflect the entity's probability-weighted estimate of variable and contingent considerations. Variable consideration will be included in the transaction price only to the extent that it is highly probable that a significant amount of revenue will not be reversed when the uncertainty associated with the variable consideration is subsequently resolved. Transaction price should also be adjusted for the effects of the time value of money if the contract contains a significant financing component and the price is reduced by the consideration payable to the customer.

Step 4: Allocate the transaction price to the performance obligations in the contract
An entity should allocate the transaction price to each performance obligation on the basis of the relative stand-alone selling prices of each distinct good or service promised in the contract. If a stand-alone price is not observable, the entity will need to estimate the price using a suitable approach.

Step 5: Recognise revenue when the entity satisfies a performance obligation
An entity should recognise revenue when it satisfies a performance obligation by transferring control of a promised good or service to the customer. A

performance obligation may be satisfied at a single point in time or over time. For a performance obligation satisfied over time, the amount of revenue allocated to that obligation is recognised over time by measuring the entity's progress towards complete satisfaction of that obligation.

(b) The contract contains a significant financing component because of the significant period of time (i.e. two years) between when the customer, Blow, pays for the machinery and when Wind transfers the machinery.

A contract with a customer which has a significant financing component should be separated into a revenue element (for the notional "cash selling price") and a loan element. Consequently, the accounting for a sale arising from a contract that has a significant financing component would be comparable to the accounting for a loan with the same characteristics.

Since Wind is effectively borrowing from Blow, it should use its own incremental borrowing rate to adjust the promised consideration.

The relevant journal entries are:

1 January 2016

Dr. Cash	$800,000	
Cr. Loan (Contract liability)		$800,000

To recognise a liability at contract inception for payment received in advance.

At 31 December 2016

Dr. Interest expense ($800,000 x 10%)	$80,000	
Cr. Loan (Contract liability)		$80,000

To adjust the promised consideration and accretes the liability by recognising interest for 2016.

At 31 December 2017

Dr. Interest expense ($880,000 x 10%)	$88,000	
Cr. Loan (Contract liability)		$88,000

To adjust the promised consideration and accretes the liability by recognising interest for 2017.

At 31 December 2017

Dr. Contract liability	$968,000	
Cr. Revenue		$968,000

To recognise revenue when transferring control of the machinery to the customer.

2.

Pan Construction Ltd
Statement of Profit or Loss and Other Comprehensive Income (Extracts)
for the year ended 31 December

	2017	**2016**
	$'m	**$'m**
Contract revenue (W2)	25.5	22.5
Contract expense (W2)	(30)	(20)
Expected loss (W2)	(2)	–
(Loss)/Profit recognised (W2)	(6.5)	2.5

Pan Construction Ltd
Statement of Financial Position as at 31 December (Extracts)

	2017	**2016**
	$'m	**$'m**
Current assets		
Contract asset (W3)	7	–
Contract receivables ($14m – $12m)	2	–
Contract costs related to future activity	4	–
Current liabilities		
Contract liability (W3)	–	2.5

Workings:

(1) Percentage of completion of contract activity

	2017	**2016**
Percentage of completion as at 31 December	($54m - $4m) / ($80m + $20m) = 50%	$20m / $80m = 25%

(2) Profit (Loss) recognised to date (i.e. as at 31 December)

	2017	**2016**
	$'m	**$'m**
Revenue recognised to date (2017: $96m × 50%; 2016: $90m × 25%)	48	22.5
Costs incurred to date	(50)	(20)
	(2)	2.5
Expected loss recognised (balancing)	(2)	–
(Loss*)/Profit recognised to date	(4)	2.5

**2017: ($4m) = ($90m + $6m) – ($80m + $20m)*

For the year ended 31 December 2017:
Contract revenue: $25.5m = $48m – $22.5m
Contract expense: $30m = $50m – $20m
Expected loss = $2m
Hence, loss recognised = $6.5m ($25.5m – $30m – $2m)

(3) Contract asset/(liability) as at 31 December

	2017	**2016**
	$'m	**$'m**
Costs incurred to date	50	20
(Less)/Add: (Loss)/Profit recognised to date (W2)	(4)	2.5
	46	22.5
Less: Payments invoiced	(39)	(25)
Contract asset/(liability)	7	(2.5)