Foreword

The first edition of this publication was produced in 2004, before the global adoption of International Financial Reporting Standards (IFRSs) began in earnest in 2005 for listed entities in the European Union, Australia and South Africa. Since then the adoption of IFRSs has continued at a steady pace, but we are now braced for the second wave of IFRS adopters in 2010 to 2012 in countries as diverse as Canada, India, Brazil, Mexico and South Korea; with other countries, such as Japan permitting the early adoption of IFRSs by listed companies for years beginning 1 April 2009 and requiring adoption for such companies from 2016, and the U.S. formulating its roadmap for the adoption of IFRSs.

As we now have the benefit of many more telecoms having adopted IFRSs, and in response to the continued demand from those companies that expect to adopt IFRSs in the near future, we considered it an appropriate time to update the publication to reflect prevailing practice under IFRSs.

Accounting in the telecoms sector has always presented evolving business and accounting issues and, while many hoped that the adoption of IFRSs would help increase consistency across the sector and aid comparability, the results to date have been mixed. As technological convergence continues apace, with fixed, mobile, Internet and other services increasingly being provided by one operator, telecoms continue to face specific accounting challenges.

Revenue recognition remains a critical accounting policy for many telecoms and the adoption of IFRSs has not eliminated all differences in the policies adopted as guidance remains somewhat vague in a number of areas. This may change as the joint revenue recognition project by the International Accounting Standards Board and the U.S. Financial Accounting Standards Board progresses, but based on the recently issued discussion paper Preliminary Views on Revenue Recognition in Contracts with Customers, the application of any revised revenue recognition standard to the telecoms sector may continue to present a number of challenges.

This publication focuses on accounting areas which raise specific issues for the telecoms sector rather than those areas that are of a more generic nature to corporates such as financial instruments, pensions or tax accounting. Our aim has not been to be prescriptive in setting out which specific policies should be applied, but instead to discuss what approaches might be appropriate and give some insights into what we consider constitutes “industry best practice”. Telecoms remains a dynamic and rapidly changing sector, which will continue to present new accounting challenges – for those working in the sector we hope you find this publication both stimulating and interesting.

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About this publication

Content
Our series of Accounting under IFRS publications address practical application issues that an entity may encounter when applying a specific International Financial Reporting Standard or applying IFRSs in a specific industry. They include discussion of the key requirements, and interpretative guidance and illustrative examples to elaborate and clarify the practical application of the requirements.

This edition of Accounting under IFRS considers issues that a telecommunications company (telecom) may encounter when applying IFRSs, including revenue recognition, capacity transactions and intangible assets. This publication is based on standards and interpretations that have been issued by the International Accounting Standards Board (IASB) by 31 October 2009.

While considering some of the key issues faced by telecoms, it is not a comprehensive analysis of the application of the entire body of IFRSs by telecoms. Further discussion and analysis about IFRSs is included in our publication Insights into IFRS.

IFRSs and their interpretation change over time. Accordingly, neither this publication nor any of our other publications should be used as a substitute for referring to the standards and interpretations themselves. For companies planning their adoption of IFRSs, it is important to monitor developments that may impact their conversion. Appendix I to this publication identifies some of the IASB’s projects that could result in changes in the short to medium term.

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Danny Vitan Israel
Jason Waldron United States

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- New on the Horizon publications that discuss consultation papers
- First Impressions publications that discuss new pronouncements
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- Disclosure checklist.

IFRS-related technical information is available at www.kpmgifrg.com.
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- Accounting and reporting
- Business impact
- Systems, processes, and controls
- People.

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# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive summary</td>
<td>6</td>
</tr>
<tr>
<td><strong>Revenue recognition</strong></td>
<td>9</td>
</tr>
<tr>
<td>Q1. To what extent should two or more contracts be accounted for as a single arrangement?</td>
<td>10</td>
</tr>
<tr>
<td>Q2. What are the general steps in determining how revenue from an arrangement is recognised?</td>
<td>11</td>
</tr>
<tr>
<td>Q3. How do you identify the components of an arrangement?</td>
<td>12</td>
</tr>
<tr>
<td>Q4. How do you allocate consideration to the separately identified components of an arrangement?</td>
<td>14</td>
</tr>
<tr>
<td>Q5. How are fair values determined?</td>
<td>17</td>
</tr>
<tr>
<td>Q6. How are customer loyalty programmes accounted for?</td>
<td>18</td>
</tr>
<tr>
<td>Q7. How are other customer incentives accounted for?</td>
<td>21</td>
</tr>
<tr>
<td>Q8. When should revenue be recognised?</td>
<td>22</td>
</tr>
<tr>
<td>Q9. When should revenue arising from the transfer of property, plant and equipment from a customer be recognised?</td>
<td>26</td>
</tr>
<tr>
<td>Q10. Should revenue be presented on a gross or net basis?</td>
<td>28</td>
</tr>
<tr>
<td><strong>Capacity transactions</strong></td>
<td>33</td>
</tr>
<tr>
<td>Q11. What is the framework for determining whether an indefeasible right of use (IRU) is a lease?</td>
<td>34</td>
</tr>
<tr>
<td>Q12. Can capacity be a separately identifiable asset?</td>
<td>35</td>
</tr>
<tr>
<td>Q13. How is an IRU that is a lease classified?</td>
<td>36</td>
</tr>
<tr>
<td>Q14. What is the accounting treatment for the exchange of IRUs?</td>
<td>39</td>
</tr>
<tr>
<td><strong>Intangible assets</strong></td>
<td>41</td>
</tr>
<tr>
<td>Q15. What are the general principles for the recognition of intangible assets?</td>
<td>42</td>
</tr>
<tr>
<td>Q16. To what extent can customer acquisition costs be capitalised?</td>
<td>44</td>
</tr>
<tr>
<td>Q17. How are acquired licences accounted for?</td>
<td>48</td>
</tr>
<tr>
<td>Q18. To what extent can the costs of internally developed intangible assets be capitalised?</td>
<td>49</td>
</tr>
<tr>
<td>Q19. In a business combination what intangible assets typically are recognised separately from goodwill?</td>
<td>51</td>
</tr>
<tr>
<td>Q20. Over what period are intangible assets amortised?</td>
<td>53</td>
</tr>
<tr>
<td>Q21. What methods of amortisation are acceptable?</td>
<td>55</td>
</tr>
<tr>
<td><strong>Property, plant and equipment</strong></td>
<td>57</td>
</tr>
<tr>
<td>Q22. What are the general principles for the recognition and measurement of property, plant and equipment?</td>
<td>58</td>
</tr>
<tr>
<td>Q23. What costs are capitalised?</td>
<td>59</td>
</tr>
<tr>
<td>Q24. What is the unit of account?</td>
<td>61</td>
</tr>
<tr>
<td>Q25. How are dismantling and removal costs accounted for?</td>
<td>64</td>
</tr>
<tr>
<td>Q26. How is depreciation calculated and recognised?</td>
<td>67</td>
</tr>
<tr>
<td><strong>Borrowing costs</strong></td>
<td>69</td>
</tr>
<tr>
<td>Q27. What is a qualifying asset?</td>
<td>70</td>
</tr>
<tr>
<td>Q28. What types of borrowing costs are eligible for capitalisation?</td>
<td>71</td>
</tr>
<tr>
<td>Q29. How is the amount of borrowing costs eligible for capitalisation calculated, and what is the period of capitalisation?</td>
<td>72</td>
</tr>
</tbody>
</table>
Impairment of non-financial assets
Q30. When are non-financial assets tested for impairment? 75
Q31. How is recoverable amount determined? 76
Q32. How are cash-generating units identified? 77
Q33. Can impairment losses be reversed? 79

Service concession arrangements
Q34. Which arrangements are within the scope of IFRIC 12? 83
Q35. How is the consideration measured and recognised under IFRIC 12? 84

Outsourcing arrangements
Q36. What factors are relevant in assessing the accounting for outsourcing arrangements? 88

Joint arrangements
Q37. How are joint ventures accounted for? 91

Appendix I
Future developments 95
Executive summary

Key points that are discussed in more detail in this publication include the following:

Revenue recognition
- Revenue recognition is probably the most judgemental and complex area of accounting within the telecoms sector.
- The majority of telecoms offer their customers a wide range of bundled products. Usually the accounting involves significant judgement in order to separate the various components within the arrangement.
- Revenue generally is allocated to the components within an arrangement on the basis of fair values, using relative fair values (relative fair value method) or by determining the fair value of undelivered components (residual method).
- Prices charged for identical or similar products or services, either by the telecom or a competitor, offer the best basis for determining fair values.
- Customer incentives, however defined, typically are accounted for as a separate component of an arrangement.
- Accounting decisions around the recognition of revenue as “principal” or “agent” are recurring themes in the sector.

Capacity transactions
- The sale and purchase of capacity, or the “right to use” capacity, on submarine and terrestrial cables gives rise to a range of accounting issues.
- A significant issue in determining the appropriate accounting for capacity transactions is whether the arrangement is or contains a lease. As part of this analysis, one of the key considerations is whether the capacity under the arrangement represents a “specific asset”.
- In certain circumstances it may be appropriate for the sale of capacity to be accounted for as a finance lease, resulting in the recognition of a gain by the “seller” at inception of the contract.

Intangible assets
- Accounting issues relating to intangible assets, in particular licences and the costs incurred in obtaining new customers, are particularly important in the telecoms sector.
- While certain customer acquisition costs will qualify for capitalisation, others will not. Under IFRSs it is not possible to simply capitalise all customer acquisition costs incurred.
- The sector has seen significant expenditure on the purchase of telecom licences in recent years. An appropriate approach may be to commence the amortisation of network licences when the related network infrastructure is ready for use as intended by management.

Property, plant and equipment
- The cost of property, plant and equipment includes all expenditure directly attributable to bringing the asset to the location and condition necessary for its intended use. These costs need not be external or incremental. Therefore often it will be appropriate for internal labour and similar costs to be capitalised. However, general and administrative costs are not capitalised.
- Individual “components” of property, plant and equipment are depreciated separately.
- In respect of asset decommissioning (asset retirement obligations), a telecom assesses the existence of an obligation and the probability of decommissioning being required. Provisions for decommissioning are measured on a present value basis, which means that discounting is required if the effect is material.

Borrowing costs
- Borrowing costs in respect of “qualifying assets” are required to be capitalised. Typically this will apply to the construction of network infrastructure by a telecom.
- When construction of a qualifying asset is funded through general borrowings, judgement is required in determining whether specific borrowings for the acquisition of non-qualifying assets can be considered as general borrowings in order to be included in capitalisable borrowing costs for the calculation of the weighted average capitalisation rate.
Impairment of non-financial assets

- The assumptions underpinning impairment calculations typically represent one of the most important judgements that management will make in preparing financial statements.
- Generally impairment testing is carried out at the level of cash-generating units, which are determined based on the source of cash inflows rather than cash flows. The identification of cash-generating units can be complex for many telecoms, especially when bundled services are provided to customers.
- Impairment testing is based on the higher of value in use, which is a prescriptive calculation based on entity-specific cash flows and a rate of return that investors would require, and fair value less costs to sell.
- Impairment losses, other than in respect of goodwill, can be reversed.

Service concessions arrangements

- Depending on the substance of the arrangement, telecoms may be required to recognise a financial asset and/or an intangible asset in respect of service concession arrangements.

Outsourcing arrangements

- Depending on the nature of the arrangement, a telecom that provides outsourced services will need to consider a range of issues, including the ownership and recognition of assets, whether the arrangement is or contains a lease, and the timing and allocation of contract revenues.

Joint arrangements

- Joint venture arrangements are common within the sector and range from the regular joint venture telecoms to arrangements that share the ownership of network infrastructure or submarine cables.
- Under current IFRSs, jointly controlled entities are either equity accounted or proportionately consolidated.
Revenue recognition

Telecoms is a dynamic and changing sector. Convergence of service delivery continues apace, with fixed-line, mobile, television and Internet service packages increasingly being provided by one telecom. This creates challenges for the determination of revenue in each period, especially with the added complexity of the vast array of rapidly changing offers and incentives typically available.

Until fairly recently, IAS 18 Revenue was the primary literature under IFRSs that telecoms could look to in accounting for their wide array of revenue-generating transactions. Despite various amendments over the years, the basic framework of IAS 18 has been in place since 1993. And while the standard contains the broad principles relating to the recognition of revenue, focusing on the transfer of risks and rewards, the lack of application guidance has resulted in a degree of inconsistency in the recognition of revenue by telecoms.

In 2006 the International Financial Reporting Interpretations Committee (IFRIC) declined to take onto its agenda the accounting for the sale of handsets with a related service contract. Although the issue was of direct relevance to telecoms, the IFRIC noted that there was a wide array of contracts in the marketplace and that any guidance would need to be principles-based. However, since the IASB was working on a revenue project (see Appendix 1 Future developments), the IFRIC did not believe that it could develop guidance on a timely basis.

In the absence of specific guidance, many telecoms turned to the detailed guidance under U.S. GAAP in determining appropriate accounting policies for revenue recognition under IFRSs. However, recently the IASB has published a number of IFRIC interpretations that provide a more defined framework for revenue recognition under IFRSs because they deal with revenue-generating transactions that have more than one component. These interpretations now serve as the required starting point for developing accounting policies even if they are not necessarily specific to the telecoms sector:

- IFRIC 13 Customer Loyalty Programmes
- IFRIC 15 Agreements for the Construction of Real Estate
- IFRIC 18 Transfers of Assets from Customers.
Q1. To what extent should two or more contracts be accounted for as a single arrangement?

Before determining the appropriate revenue recognition for an arrangement, it is necessary to consider whether two or more contracts or transactions should be linked and accounted for as a single arrangement.

IAS 18 requires that two or more transactions be considered a single arrangement “when they are linked in such a way that the commercial effect cannot be understood without reference to the series of transactions as a whole.”

Evaluating whether more than one transaction should be accounted for as a single arrangement is ultimately a matter of judgement based on the specific facts and circumstances. However, to date the IFRIC has agreed tentatively on the following indicators, in the context of revenue recognition, that transactions could be linked:

- The transactions are entered into at the same time or as part of a continuous sequence and in contemplation of one another.
- The transactions, in substance, form a single arrangement that achieves or is designed to achieve an overall commercial effect.
- One or more of the transactions, considered on its own, does not make commercial sense, but they do when considered together.
- The contracts include one or more options or conditional provisions for which there is no genuine commercial possibility that the option(s) or conditional provision(s) will not be exercised or fulfilled.
- The occurrence (or non-reversal) of one transaction is dependent on the other transaction(s) occurring.

**Example 1.1**

Telecom T1 and Telecom T2 enter into a contract to share space on each other’s mobile towers, and at the same time enter into a separate contract whereby T1 will sell certain other tower sites to T2. T1 has no similar tower-sharing contracts with other telecoms and there are indications that this additional feature has influenced the price obtained for the sale of the tower sites. While there are two separate transactions and two separate contracts, in this example the facts and circumstances indicate that the transactions are linked and that the appropriate accounting for each of the transactions should be determined considering the arrangement as a whole. This means that the two transactions would be viewed as separate components of a single arrangement (see Question 3).
Q2. What are the general steps in determining how revenue from an arrangement is recognised?

Once the arrangement has been identified (see Question 1), under IFRSs the general steps required in evaluating revenue recognition are illustrated in this diagram. The diagram is used as a basis for answering Questions 3 to 8.

Step 1: Identify Components (Questions 3, 6, 7)

Separate components

- Sale of goods
- Rendering of services
- Construction contracts

Step 2: Allocate consideration (Question 4)

Fair values (Question 5):
- Relative fair value method
- Residual method

Step 3: Recognise revenue (Question 8)

Effective control and significant risks and rewards passed in their entirety

Effective control and significant risks and rewards passed on a continuous basis

- Can the outcome of the transaction be estimated reliably?
  - Yes: Recognise revenue by reference to the stage of completion
  - No: Recognise revenue to extent of recoverable expenses recognised

- At completion, upon or after delivery
Q3. How do you identify the components of an arrangement?

Telecoms typically supply customers with equipment when they sign up for a service contract. The operator may charge the customer full price for the equipment, a subsidised price, or sometimes there will be no separate charge at all. While unlikely to represent a telecom’s principal operating activity, equipment sales such as mobile handsets, modems, and set-top boxes, may constitute a significant revenue stream for telecoms.

IAS 18 does not provide detailed guidance on how separate components within an arrangement should be identified. However, the following criteria for separation are included in recently-issued IFRIC 18 (see Question 9) and, in our view, are relevant by analogy to telecoms:

- the component has stand-alone value to the customer; and
- the fair value of the component can be measured reliably.

If a delivered element of a transaction is not a separately identifiable component, then it is accounted for as an integral part of the remaining components of the transaction, as illustrated in Example 4.1.

**Equipment plus service**

Whether or not equipment has stand-alone value to the customer, other than as part of the ongoing service, often is judgemental and requires an evaluation of the facts and circumstances relating to the equipment. The actual price charged or the amount of recovery of the original cost of the equipment is not relevant when considering separability as long as it has stand-alone value to the customer, i.e., not just scrap value.

The following is a list of general considerations that may be considered when assessing whether equipment has stand-alone value to the customer:

- If equipment could be acquired in an open market transaction apart from the seller of the related service, and the service provider allows use of that equipment on their network, then generally it is presumed that the equipment has stand-alone value.
- The existence of a resale market is an indication of stand-alone value on the basis that the equipment could be sold for an amount greater than scrap value.
- Additional features such as built-in high quality cameras, MP3 players and other functionality may be of significant value to a customer in their own right and indicate stand-alone value to the customer.
- The availability of competitively priced tariffs without also requiring the purchase of equipment indicates stand-alone value for the equipment because a customer could source the equipment from an alternative supplier or telecom.

If, after an evaluation of the facts, it is determined that equipment does have stand-alone value to the customer, then the next step is to allocate the consideration received to the different components. This is discussed in Question 4.

In our experience, it is becoming uncommon for telecoms to assert that a handset has no stand-alone value.

**Activation and connection fees charged by mobile operators**

Although uncommon in many major developed mobile phone markets, activation and connection fees remain a feature in some countries. Some costs albeit usually not significant, will be incurred in connecting customers to a network, e.g., sending out the SIM card or activating the number. The question is whether the service provided (connecting to the network) is a separate component of the transaction for revenue recognition purposes.

Activation and connection generally is dependent upon the provision of a handset or ongoing service. Therefore, generally it is not a separate component of the transaction, and we would not expect any revenues to be attributed to activation or connection. Instead, the revenue attributed in the contract to activation and connection would be part of the overall consideration that is allocated to the other separately identified components (see Question 4).
Installation fees charged by fixed-line telecoms

A common feature of telecom services is that they require set-up costs to be incurred before the ongoing service can be provided. These costs relate to the installation of equipment at the customer’s premises or laying physical connections. When significant, telecoms may seek to recover costs through separate installation fees. Again, the question is whether the service provided (installation) is a separate component of the transaction for revenue recognition purposes.

Following the indicators of stand-alone value discussed above, typically the key considerations are:

- whether the customer has a choice of who does the installation; and
- whether the telecom allows the customer to use other service providers once installation is complete.

For example, in a number of countries a fixed-line telecom charges a one-off installation fee for a new line to a customer’s premises; however, once the installation is complete the customer can choose from a range of providers to supply the ongoing service. In that case generally we would expect installation to be identified as a separate component for revenue recognition purposes.

Upgrade and downgrade fees

Telecoms often charge fees to customers to either increase their service level (upgrade fee) or decrease their service level (downgrade fee). In their simplest form, similar to activation fees (see above), an upgrade or downgrade in itself generally has no stand-alone value to the customer. In that case generally we would expect such fees to be part of the overall consideration that is allocated to the other separately identified components (see Question 4).

However, in some cases there may be activities inherent in upgrade or downgrade fees that do represent a separately identifiable component of the arrangement, and therefore it is necessary to evaluate carefully the particular facts and circumstances.

Warranties

Handsets and other equipment usually are provided with a standard warranty, generally for 12 months. In accordance with IAS 18 and IAS 37 Provisions, Contingent Liabilities and Contingent Assets, typically such a standard warranty is not identified as a separate component of the transaction. Instead, a provision is recognised at the time of revenue recognition in respect of the equipment for the best estimate of the costs to be incurred in settling any claims.
Q4. How do you allocate consideration to the separately identified components of an arrangement?

The second step in recognising revenue is to allocate the overall consideration under the arrangement to the separate components that have been identified (see Question 3). While IAS 18 largely is silent on the allocation of revenue to components, there is specific allocation guidance included in interpretations such as IFRIC 13 in respect of customer loyalty programmes and IFRIC 15 in respect of real estate sales. Under these interpretations, revenue could be allocated to components using either of the following methods:

- relative fair values; or
- fair value of the undelivered components (residual method).

Using relative fair values, the total consideration is allocated to the different components based on the ratio of the fair values of the components relative to each other. Using the residual method, the undelivered components are measured at fair value and the remainder of the consideration is allocated to the delivered component(s).

IAS 18 also refers to allocating revenue to the undelivered components based on the expected cost of the deliverable plus a reasonable margin (cost-plus-margin method); effectively this is an application of the residual method, but without the use of market data. This is discussed further in Question 5.

In our view, the reverse residual method, in which the delivered components are measured at fair value and the remainder of the consideration is allocated to the undelivered component(s), is not an appropriate basis for allocating revenue. Application of the reverse residual method may result in excessive revenue being allocated to the delivered components of a transaction by allocating all of the discount, if any, embedded in the arrangement to the undelivered components.

**Measurement**

Revenue is measured at the fair value of the consideration received, taking into account any trade discounts and volume rebates. The amount of revenue recognised is discounted to the present value of consideration due if payment extends beyond normal credit terms. In our view, when payment for goods sold or services provided is deferred beyond normal credit terms, and the telecom does not charge a market interest rate, the arrangement effectively contains a financing arrangement and interest should be imputed if the impact is material. In these cases the amount of revenue recognised on the goods sold or services provided will be less than the amount of consideration that ultimately will be received as a portion will be deemed to be interest income.

**Relative fair value method**

Telecoms generally charge less for deliverables in a bundled arrangement than they charge for each component separately. The relative fair value method allocates this discount across all separately identifiable components. Total proceeds are allocated based on the relative fair values of all the deliverables in the arrangement.

---

**Example 4.1**

Telecom T runs a promotion in which new customers who sign a two-year contract receive a “free” handset. The contract requires the customer to pay a cancellation fee of 300 if they cancel the contract; in the event that a customer stops paying, T has a history of enforcement and has determined collectibility of future amounts due under the contract as probable. There is a one-time “activation fee” of 50 and a monthly fee of 40 for the ongoing service. The same monthly fee is charged by T regardless of whether a “free” handset is provided. The handset costs T 100, and T frequently sells the handset separately for 120.
T has analysed the elements of the transaction as follows (see Question 3):

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Status</th>
<th>Stand-alone?</th>
<th>Fair value reliably measurable?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handset</td>
<td>Delivered</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Activation</td>
<td>Delivered</td>
<td>No</td>
<td>N/A</td>
</tr>
<tr>
<td>Phone service</td>
<td>Undelivered</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The arrangement consideration of 1,010 (50 + (24 x 40)) is allocated to the separately identifiable components based on their relative fair values as follows: *

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Per contract</th>
<th>Fair value</th>
<th>Allocated value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handset</td>
<td>0</td>
<td>120</td>
<td>112</td>
</tr>
<tr>
<td>Activation</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>Phone service</td>
<td>960</td>
<td>960</td>
<td>898</td>
</tr>
<tr>
<td></td>
<td>1,010</td>
<td>1,080</td>
<td>1,010</td>
</tr>
</tbody>
</table>

* It is assumed that the consideration is not required to be discounted to its present value (see above Measurement).

**Residual method**

The residual method measures the undelivered component(s) at fair value and therefore allocates the residual to the delivered component(s) in the arrangement.

**Example 4.2**

Consider the same facts as in Example 4.1, except that T elects to apply the residual method.

In this case T would allocate 960 to the phone service, which is its fair value, and the balance of consideration of 50 (1,010 - 960) to the handset resulting in a loss on the sale of the handset of 50. As in Example 4.1, no consideration would be allocated to activation because it is not a separately identifiable component of the arrangement. The residual method effectively allocates the bundled discount of 70 in this example (1,080 - 1,010) to the delivered element(s). As further discussed in Question 16, in our view there is no basis under IFRSs to carry forward the loss arising on the handset sale.

**Upfront consideration less than value allocated to delivered component(s)**

As in Example 4.1, the amount received from the customer upon signing the contract may be less than the revenue allocated to the delivered component, e.g., the handset. This raises the question of whether the full amount of allocated revenue may be recognised.

As one of the criteria to be met prior to recognising revenue, IAS 18 requires that “it is probable that the economic benefits associated with the transaction will flow to the entity.” In some cases that test may be met because (1) the contract includes a cancellation fee that, together with any cash received or receivable, covers the upfront revenue recognised; and (2) the telecom intends and is able to enforce the cancellation fee, including a history of such enforcement. However, IAS 18 does not require such a strict interpretation to be applied and a telecom should assess probability based on its expectations of what will happen under the contract as a whole, typically based on past experience with similar customers and contracts. Therefore, although IAS 18 imposes limits on the amount of revenue that can be recognised, the probability test in the standard does not in itself create a blanket prohibition on recognising revenue in advance of cash being paid at the time of future services being provided.
However, faced with only a general probability test under IFRSs, and on the basis that this is a very relevant issue for the telecoms sector, historically some telecoms have looked to the more specific guidance of U.S. GAAP. EITF 00-21 Revenue Arrangements with Multiple Deliverables (recently modified under EITF 08-01 Revenue Arrangements with Multiple Deliverables, which is effective for periods beginning after 15 June 2010). The U.S. guidance limits the revenue recognised to the amount to which the telecom is entitled legally; this includes any cancellation fees that would be payable if the customer cancelled the contract, assuming that the telecom would pursue the customer in the event of cancellation. While this accounting may be attractive to some telecoms as it can avoid some of the practical difficulties that can arise when revenue recognition principles do not align with amounts billed to customers, our preference is for the general test in IAS 18 to be applied without reference to U.S. GAAP.

**Example 4.3**

Assume the same facts as in Example 4.1, except that the cancellation fee is only 50 instead of 300. Also assume that it is probable that T will recover revenues in excess of the amount recognised upon the sale of the handset.

Therefore T records the following revenue-related entry upon the sale of the handset:

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash (activation fee collected)</td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Accrued revenue</td>
<td></td>
<td>62</td>
</tr>
<tr>
<td>Revenue</td>
<td></td>
<td>112</td>
</tr>
<tr>
<td><strong>To recognise revenue from sale of handset</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q5. **How are fair values determined?**

There is no requirement under IFRSs for the fair value of the separately identifiable components of an arrangement to be determined only by reference to an active market or based on “objective” evidence, which may have been the case under other GAAPs, such as U.S. GAAP until recently. Additionally, it also is sufficient to determine the fair value of only the undelivered component(s), with the residual revenue being allocated to the component(s) already delivered; see Question 4, which discusses the residual method.

The best evidence of fair value is the price charged by the telecom when an identical product or service is sold on a stand-alone basis. This was the fact pattern illustrated in Example 4.1, in which we made the assumption that both the delivered component (handset) and the undelivered component (phone service) could be measured by reference to single-component arrangements entered into by the telecom.

If the telecom is not able to establish fair values by reference to its own products and services, then the next most relevant reference point is the price of a similar product or service sold by the telecom or by a competitor, adjusted for significant differences between the products or services. In our experience, market comparables usually are readily available for deliverables such as handsets, modems and installation. However, care is required with other, more tailored, deliverables because of the proprietary nature of technology.

In our view, the cost-plus-margin approach (see Question 4) generally should be applied only when there is a lack of market inputs, i.e., it is used more as a last resort. This method may require data-tracking systems and processes as well as clear policies for what is included in “cost” and how a “reasonable profit margin” is supported. This may involve operations and IT personnel and require significant effort for telecoms with multiple products and services. Judgements may include an allocation of network costs to various services and whether or to what extent to allocate research or development expenditures for new product features and enhancements to part of the “cost”.

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Q6. How are customer loyalty programmes accounted for?

The costs involved in acquiring new customers are high and therefore telecoms, as in many other industries, seek to minimise customer churn by offering retention incentives. For example, a telecom may award points for amounts spent on airtime and a customer can redeem those points for money off their monthly bill or to obtain a handset upgrade.

IFRIC 13 Customer Loyalty Programmes is effective for annual periods beginning on or after 1 July 2008. In summary, IFRIC 13 requires revenue to be deferred to account for an entity's future obligations in respect of loyalty points awarded; the previously accepted method of accruing the expected future cost of settling the reward obligation no longer is allowed.

Changes in accounting policy as a result of applying IFRIC 13 for the first time are accounted for retrospectively, i.e., by revising comparatives and adjusting the opening balance of retained earnings in the comparative period. If it is impracticable to apply the change in policy fully retrospectively, then it is applied to the earliest period practicable; this might be the start of the period in which IFRIC 13 is adopted.

For those telecoms that did not already defer revenue, but instead accrued for the expected cost of settlement, this change may be significant because the marginal cost of providing additional services usually is significantly below their fair value.

Scope of IFRIC 13
Any loyalty programme with the following features is within the scope of IFRIC 13:

- the telecom grants award credits to a customer as part of a sales transaction; and
- subject to meeting any other conditions, the customer can redeem the award credits for free or discounted goods or services in the future.

Therefore the scope of IFRIC 13 is not limited to loyalty points programmes, but captures a wide range of sales incentives that might include, for example, vouchers, coupons, and discounts on renewals.

Allocation of revenue to award credits
IFRIC 13 requires an entity to recognise the award credits as a separately identifiable component of an arrangement (see Question 3) and to defer the recognition of revenue related to the award credits. The revenue attributed to the award credits takes into account the expected level of redemption.

The consideration received or receivable from the customer is allocated between the current sales transaction and the award credits in accordance with IFRIC 13 using either of the following methods, which is consistent with the guidance outlined in Question 4:

- relative fair values; or
- fair value of the award credits (residual method).

In estimating the fair value of the award credits, a telecom takes into account:

- the fair value of the goods and services that can be obtained from exercise of the award credits, e.g., by comparison with the fair value payable for those goods and services by customers who have not earned award credits; and
- the proportion of award credits granted that are expected not to be redeemed, i.e., expected forfeitures.

Additionally, the interpretation notes that other estimation techniques may be available. For example, if a telecom (seller) pays a third party to supply the awards, then the fair value of the award credit could be estimated by reference to the amount that the telecom pays the third-party supplier plus a reasonable profit margin. However, judgement is required to select and apply the estimation technique that is most appropriate in the circumstances.
Recognition of revenue
The revenue from award credits is recognised as the telecom (seller) fulfils its obligation to provide the free or discounted goods or services or as the obligation lapses. The revenue is recognised on a pro rata basis by reference to the total number of award credits expected to be redeemed, i.e., net of expected forfeitures.

The total amount of revenue deferred at the time of the original sale is not recalculated even if there is any subsequent change in the estimates of awards expected to be redeemed. Instead, the amount recognised as revenue is trued up, so that the amount recognised to date equates to an appropriate proportion of the total deferred income taking into account actual redemptions and the revised estimates of expected future redemptions.

Example 6.1
Telecom T runs a loyalty scheme, rewarding a customer’s airtime spend. Under this scheme, customers are granted 10 loyalty points (or award credits) for every CU 100 spent on airtime. Customers can redeem their points for a discount off a new handset. The loyalty points are valid for five years and 50 points entitle a customer to a discount of CU 50 from the retail price of the handset.

During 2008 T had sales of CU 1,000,000 and granted 100,000 loyalty points to its customers. Based on the expectation that only 80,000 loyalty points would be redeemed, management estimated the fair value of each loyalty point granted to be CU 0.80. During 2008 30,000 points were redeemed in exchange for handsets, and at the end of the year management still expected a total of 80,000 points to be redeemed, i.e., an additional 50,000 points over the 30,000 redeemed already.

T recorded the following entries in 2008 in relation to the loyalty points granted in 2008:

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Revenue</td>
<td>920,000</td>
</tr>
<tr>
<td>Deferred revenue (100,000 x 0.80)</td>
<td>80,000</td>
</tr>
</tbody>
</table>

To recognise revenue in relation to services provided

At the end of the year, the balance of the deferred revenue was CU 50,000 ((50,000 / 80,000) x CU 80,000). Therefore the difference in the deferred revenue balance was recognised as revenue for the year:

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred revenue (80,000 - 50,000)</td>
<td>30,000</td>
</tr>
<tr>
<td>Revenue</td>
<td>30,000</td>
</tr>
</tbody>
</table>

To recognise revenue in relation to points redeemed in 2008

During 2009 35,000 points were redeemed, and at the end of the year management expected a total of 85,000 points to be redeemed, i.e., an increase of 5,000 over the original estimate. The fair value of each award credit does not change, but the redemption rate is revised based on the new total expected redemptions. At the end of the year, the balance of deferred revenue is CU 18,824 ((20,000 / 85,000) x CU 80,000). T records the following entry in 2009 in relation to the loyalty points granted in 2008:

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred revenue (50,000 - 18,824)</td>
<td>31,176</td>
</tr>
<tr>
<td>Revenue</td>
<td>31,176</td>
</tr>
</tbody>
</table>

To recognise revenue in relation to points redeemed in 2009
The reversal of deferred revenue in 2009 comprises two elements:

- A downwards adjustment of 1,765 to the 2008 reversal based on the revised expectation of redemptions: \((\frac{80,000}{85,000}) \times \text{CU} \ 30,000\) - \text{CU} \ 30,000.
- A reversal of 32,941 in relation to redemptions in 2009, based on the revised expectation of redemptions: \((\frac{80,000}{85,000}) \times \text{CU} \ 35,000\).

Alternatively, on a cumulative basis \text{CU} \ 61,176 has been released, which can be calculated as \((\frac{65,000}{85,000}) \times \text{CU} \ 80,000\).
Q7. How are other customer incentives accounted for?

In addition to loyalty programmes (see Question 6), there are a myriad of promotions offered by telecoms to attract new customers or to retain existing ones; examples include cash incentives paid to a new customer or to an existing customer who introduces a new customer, free or discounted services, subsidised or free equipment (such as handsets, modems or set-top boxes), and gifts in the form of products or services apart from those specific to the contract.

In our experience, the accounting for sales incentives by telecoms is an area in which practice has varied significantly. However, the introduction of recent interpretations dealing with components of a single arrangement, and in particular IFRIC 13 dealing with customer loyalty programmes (see Question 6), has begun to provide a more robust framework that we believe will lead to greater consistency in the future.

Accordingly, we believe that the following approach is appropriate even if a customer incentive is not within the scope of IFRIC 13:

- Identify whether the customer incentive should be identified as a separate component of the arrangement (see Question 3).
- If yes, then allocate revenue to that component in an appropriate manner (see Questions 4 to 6).
- If no, then account for the incentive as an integral part of the arrangement as a whole (see Question 3).

In our view, cash incentives are rebates under IFRSs and should be recognised as a reduction of revenue. The fact that cash incentives are payments made to the customer upon inception or renewal of an arrangement does not change the character of the payment and it is considered to be part of the overall net consideration received by the telecom. A cash incentive paid for introducing a new customer is a customer acquisition cost and should be accounted for in accordance with the guidance in Question 16.

Further, Question 16 focuses on the debit entry in relation to customer acquisition costs, including non-cash customer incentives, i.e., whether the cost of providing the non-cash incentive should be capitalised or expensed as incurred, and includes a decision tree to assist in the analysis.

**Example 7.1**

Telecom T runs a promotion for its prepaid customer base. A customer purchasing a standard prepaid card for CU 50 normally would receive 100 minutes’ calling time. However, during the promotion the customer receives an additional 20 bonus minutes.

The revenue per minute of airtime is CU 0.42 (50/120). Therefore T will recognise revenue of CU 0.42 for every minute of airtime used by the customer if it assumed that the customer will use all of the bonus minutes, i.e., the forfeiture rate is nil. Example 6.1 illustrates the accounting when forfeitures are expected.
Q8. **When should revenue be recognised?**

Having identified the separate components within an arrangement (see Question 3), and allocated the consideration to each of those components (see Questions 4 to 7), revenue is recognised when the relevant criteria for each component are met.

There are a number of criteria that must be met in order for revenue to be recognised, both for the sale of goods and the provision of services:

- In respect of the sale of goods, the key requirement for a telecom is that the risks and rewards of ownership have been transferred; typically this occurs at a single point in time. Therefore, for example, revenue allocated to the upfront sale of a handset or a set-top box is recognised when the item has been delivered to the customer and has been activated, if required.

- In respect of services provided, the key requirement for a telecom is analysing the timing of when the service is provided. Therefore revenue is recognised by reference to the stage of completion of the transaction. For example, an upfront fixed charge for providing an ongoing service is recognised on a straight-line basis over the period of the contract.

- In respect of the sale of goods and services provided, a further key requirement is that “it is probable that the economic benefits associated with the transaction will flow to the entity” (see Question 4).

**Prepaid mobile phone revenues**

In many markets prepaid mobile services are the norm rather than post-paid contract-type services. This is particularly the case in many developing countries. While average revenue per user typically may be lower than in the post-paid market, many telecoms specifically target the prepaid market as it enables them to service customers who may not be able to obtain a post-paid contract due to concerns over creditworthiness. By receiving cash upfront, the telecom removes the credit risk in dealing with such customers.

Customers typically pay for ongoing services by purchasing cards, vouchers, or by purchasing points by phone, on-line, or via other channels such as cash machines and customer payment terminals. Irrespective of the specific arrangement, the accounting issue is when to recognise revenue in respect of services purchased in advance.

From an accounting perspective, revenue should follow performance rather than the timing of payment as the telecom has an obligation to provide service to the end customer. This means that revenue should be recognised when calls are made. However, practical accounting difficulties arise when telecoms cannot readily track card or other forms of usage. In many cases approximations, based on expected usage and the life of the card or other credits, may be acceptable.

**Example 8.1**

On the first day of month one, telecom T sells a prepaid card to dealer D for CU 50 in exchange for cash. The prepaid card has an expiry date of two months from the date of activation and provides the end customer with 50 minutes of airtime. However, if a customer recharges their card prior to expiry, then any credit is “carried over” and the expiry date is extended to two months from the date of re-charge.

In this type of transaction, the dealer also is likely to receive a commission for acting as a sales / collection agent in the transaction. However, this is ignored in this example.

During month one, D sells the card to prepaid customer C, who uses the card as follows:

- C activates the card during month two.
- At the end of month two, T runs a system usage report that shows that the remaining credit on C’s card is 30 minutes.
- In month three C recharges the card with an additional CU 40 of credit that provides 40 minutes of airtime, which is paid directly to T. At the end of month three the remaining credit on C’s card is 35 minutes.
- At the end of month four, the remaining credit on C’s card is 10 minutes.
T records the following revenue-related entries in months one to four:

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td></td>
</tr>
<tr>
<td>Deferred revenue</td>
<td></td>
</tr>
<tr>
<td>To reflect sale of prepaid card to D in month 1</td>
<td>50 50</td>
</tr>
<tr>
<td>Deferred revenue (50 - 30)</td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td></td>
</tr>
<tr>
<td>To reflect prepaid card usage in month 2</td>
<td>20 20</td>
</tr>
<tr>
<td>Cash</td>
<td></td>
</tr>
<tr>
<td>Deferred revenue</td>
<td></td>
</tr>
<tr>
<td>To reflect top-up of prepaid card in month 3</td>
<td>40 40</td>
</tr>
<tr>
<td>Deferred revenue ((30 + 40) - 35)</td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td></td>
</tr>
<tr>
<td>To reflect prepaid card usage in month 3</td>
<td>35 35</td>
</tr>
<tr>
<td>Deferred revenue (35 - 10)</td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td></td>
</tr>
<tr>
<td>To reflect prepaid card usage in month 4</td>
<td>25 25</td>
</tr>
</tbody>
</table>

In Example 8.1 it is assumed that the customer will use all of the minutes purchased, and therefore the calculation of revenue in each period depends on the outstanding minutes on the card, ignoring forfeitures. However, if forfeitures were expected, then this would alter the revenue per minute and the overall timing of revenue recognition. This is similar to the accounting illustrated in Example 6.1.

**Escalating fees**

It is common for telecoms to advertise promotions for customers to sign up for a service contract and receive, for example, the “first two months free.” The promotion is a means to facilitate customer acquisition. In such cases the “free” period is simply part of the overall period of the contract, and the consideration for the service would be allocated across the full contract period, assuming that there is an enforceable contract and it is probable that future economic benefits will flow to the provider.

**Example 8.2**

Telecom T sells handsets bundled with a non-cancellable 12-month service contract. The customer pays 60 upfront on delivery of the handset. The first month’s fee is waived, and thereafter the customer is committed to pay a monthly service fee of 20, which is the standard tariff without the handset. The handset costs T 100 and T frequently sells the handset separately for 120. In the event that a customer stops paying, T has a history of enforcement.

The arrangement consideration of 280 (60 + (11 x 20)) is allocated to the separately identifiable components based on relative fair values (see Question 4) as follows: *

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Per contract</th>
<th>Fair value</th>
<th>Allocated value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handset</td>
<td>60</td>
<td>120</td>
<td>93</td>
</tr>
<tr>
<td>Phone service</td>
<td>220</td>
<td>240</td>
<td>187</td>
</tr>
<tr>
<td></td>
<td>280</td>
<td>360</td>
<td>280</td>
</tr>
</tbody>
</table>
T records the following revenue-related entries during the first month of the contract:

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>60</td>
</tr>
<tr>
<td>Accrued revenue</td>
<td>33</td>
</tr>
<tr>
<td>Revenue</td>
<td>93</td>
</tr>
<tr>
<td>To recognise revenue from sale of handset</td>
<td></td>
</tr>
<tr>
<td>Accrued revenue</td>
<td>16</td>
</tr>
<tr>
<td>Revenue (187/12)</td>
<td>16</td>
</tr>
<tr>
<td>To recognise revenue in relation to phone service</td>
<td></td>
</tr>
</tbody>
</table>

* It is assumed that the consideration is not required to be discounted to its present value (see Question 4 Measurement).

**Advertising**

While often not a core revenue stream, income from advertising is a common secondary source of revenue for many telecoms. Traditionally this was limited to telephone directory services, but other advertising models are beginning to emerge within the sector. The general principle is that revenue for advertising services is recognised when the related advertisement is published. However, it is important to consider whether the telecom has any ongoing service obligation after initial publication, in which case an appropriate portion of revenue should be deferred until the performance obligation is satisfied.

**Example 8.3**

Telecom T produces, publishes and distributes telephone directories annually. T sells advertising space to a third party for 100 in advance. As well as advertising in the hard copy directory, advertisers also have their advert placed in an online directory for a period of 12 months.

T has determined that sale of advertising in hard copy and online format are separable services (see Question 3) and a fair value allocation of revenue is 76 for the hard copy directory and 24 for the online directory is appropriate (see Question 4).

Therefore T recognises revenue as follows:

- When the hardcopy is first distributed, 76.
- In each of the 12 months in which the advertising appears online, 24 (24/12).

**Equipment sales via distributors**

In many markets it is common for distributors or retail outlets to sell equipment to customers (usually mobile phones) and to connect them to a specific telecom. When the telecom has sold the equipment to the retailer, the appropriate timing of revenue recognition by the telecom depends on whether the retailer is acting as a principal or as an agent (see Question 10). If the retailer acts as principal, revenue will be recognised by the telecom upon sale of the equipment to the retailer. However, if the retailer acts as an agent, revenue will be recognised by the telecom only upon sale of the equipment by the retailer to the end customer.
Example 8.4

Telecom T sells mobile phones to retail outlet X, who then sells them to end customers at retail prices determined by T. Any phones unsold by X are returned to T when T releases the latest models, or are sold by X at reduced prices as directed by T. All marketing campaigns of T are directed at the end customers of the phones, although all its sales are through X. X is not required to settle the purchase invoices from T until it has sold the phones to its customers.

In this example it would not be appropriate for T to recognise a sale when goods are despatched to X, since X is acting as an agent of T and the risks and rewards of ownership of the phones have not been transferred to X. Accordingly, T should recognise a sale only when X sells the phones to the end customer.
Q9. When should revenue arising from the transfer of property, plant and equipment from a customer be recognised?

IFRIC 18 *Transfers of Assets from Customers* applies to transfers of property, plant and equipment, or cash to acquire it, from customers received on or after 1 July 2009. In order to be within the scope of IFRIC 18, the contributed property, plant and equipment must be used by the telecom to provide access to a supply of goods or services, either by providing a connection and/or by providing ongoing access to a supply of goods or services.

In some cases the party contributing the asset (the transferor) may be different from the party that will receive the access to a supply of goods or services (the ultimate customer). This fact does not affect the accounting outcome under IFRIC 18.

A telecom that has received a contribution within the scope of the interpretation recognises the contribution as an asset only if it determines that the item contributed meets both the definition of an asset and the recognition criteria for property, plant and equipment (see Question 22).

On initial recognition the asset is measured at fair value and a corresponding amount is recognised as revenue in accordance with IAS 18. The typical obligations of a telecom upon receipt of the asset will be to (1) connect the customer(s) to the network; and (2) provide ongoing access to services to the customer(s). Consistent with the guidance in Question 3, the separate components of the arrangement are identified by considering whether:

- the component has stand-alone value to the customer; and
- the fair value of the component can be measured reliably.

One of the indicators in IFRIC 18 for providing the customer with ongoing access to a supply of goods or services to be a separately identifiable component of the arrangement is that, in the future, the customer receives the ongoing access at a price lower than would be charged without the transfer of the item of property, plant and equipment. However, in practice all facts and circumstances will need to be considered before deciding on the most appropriate allocation of revenue to components of the arrangement.

**Example 9.1**

Telecom T has agreed to provide fixed-line telecommunication services to the residents of a new residential development complex. Existing local residents are required to contribute cash in order for T to construct a telephone exchange station that will connect all houses within the residential complex to T’s nearest network infrastructure. It is assumed in this example that the newly constructed exchange station meets the criteria to be recognised as property, plant and equipment by T (see Question 22).

By regulation, T has an obligation to provide ongoing access to the fixed-line network for all residents in the complex. The amount contributed by the local residents is a one-off “connect fee”; in the event that there is a resale of residential property in that complex, the new owners do not have to pay the connection fee. T charges all residents the same price for its fixed-line services irrespective of whether they are the initial owners of a property (who contributed to the exchange) or subsequent owners of a property (who did not contribute to the exchange). Residents have the option to use other service providers in that area, although all residents use the constructed exchange station to connect to the network.

In this example, the fact that residents who are the users of the network pay the same price for ongoing services, irrespective of whether they contributed to the connection to the exchange station, indicates that the obligation to provide ongoing services is not a separately identifiable component of the arrangement. Rather, connecting the residents to the network is the only service to be delivered in exchange for the receipt of money for constructing the exchange station. Therefore T recognises revenue when residents of the complex are connected to the exchange station.
Example 9.2

Company X develops a new commercial property, which includes offices and retail space. X approaches telecom T to provide telephone facilities for the new development.

Under the agreement reached, T will have an exclusive right to provide the services to offices and shops located in the new development for 20 years. However, in return X will receive a rate for services lower than T generally would charge to its other customers. The standard monthly rate charged by T is 120, while the rate offered to X is 100.

To fulfil this agreement, X is required to provide a telephone exchange station tailored to the requirements of the new development. The exchange station will be owned and maintained by T. The estimated fair value of the exchange station is 10,000, and its useful life is 25 years.

In this example the arrangement has two separately identifiable components:

- to connect the customers to the telephone network; and
- to provide future services at a reduced rate.

Revenue is allocated to the two components using the residual method (see Question 4), with the fair value attributable to the ongoing service being calculated by reference to the fair value of the discount that X will receive over the period of the agreement (ignoring any effects of discounting): \((120 - 100) \times 12 \text{ months} \times 20 \text{ years} = 4,800\).

Therefore T records the following revenue-related entries:

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property, plant and equipment</td>
<td>Deferred revenue</td>
</tr>
<tr>
<td>Deferred revenue</td>
<td>To recognise asset received from Company X</td>
</tr>
<tr>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Deferred revenue (10,000 - 4,800)</td>
<td>Revenue</td>
</tr>
<tr>
<td>Deferred revenue (4,800 / 20)</td>
<td>To recognise revenue in relation to phone service (each year over 20 years)</td>
</tr>
<tr>
<td>5,200</td>
<td>5,200</td>
</tr>
<tr>
<td>240</td>
<td>240</td>
</tr>
</tbody>
</table>
Q10. Should revenue be presented on a gross or net basis?

There are numerous examples in the telecoms sector in which the telecom is just one of a number of parties involved in the provision of a service to an end user. Many issues arise in determining whether each party in any particular chain should report the transaction on a gross or net basis.

In April 2009 the IASB, as part of its annual improvements process, issued amendments to the illustrative guidance in the appendix to IAS 18 in respect of identifying an agent versus a principal in a revenue-generating transaction. Prior to the amendments, IFRSs included no guidance other than a general requirement that in an agency relationship, amounts collected on behalf of and passed on to the principal are not revenue of the agent.

The appendix is not formally part of the standard and therefore the IASB did not specify an effective date for the amendments. On that basis, the amendment should be applied immediately as guidance in determining whether a telecom is acting as an agent or principal in a transaction.

Usually a telecom working as an agent does not have exposure to the significant risks and rewards of ownership of goods or rendering of services under that agreement. A telecom having exposure to the significant risks and rewards associated with the sale of goods or rendering of services covered by the agreement is acting as a principal.

The following features should be considered to determine if a telecom is acting as a principal or an agent. None of the indicators noted below should be considered presumptive or determinative, but an overall assessment would need to take into account the strength and pervasiveness of the indicators:

- **Indicators that an entity is acting as a principal** include that it:
  - has primary responsibility for providing the goods and services to the customer or for fulfilling the order;
  - has inventory risk before or after the customer order, during shipping or on return;
  - has discretion in establishing prices (directly or indirectly); and
  - bears the customer’s credit risk for the amount receivable from the customer.

- **An indicator that an entity is acting as an agent** is that it performs services for compensation on a commission or fee basis, which is fixed either in terms of an amount of currency or a percentage of the value of the underlying goods or services provided by the principal.

In particular, the amendments mention credit risk on the amount receivable from the customer as an indicator that the entity is acting as a principal. In our experience, prior to the amendments telecoms might have concluded that they were acting as an agent despite taking full credit risk. In such cases the telecom was acting in two capacities: (1) as an agent linking the customer and supplier; and (2) as a collection agent. While the above indicators are not conclusive individually, it remains to be seen whether the guidance issued by the IASB causes more telecoms to conclude that they are acting as a principal when they take on full credit risk.

**Mobile content**

The mobile phone is increasingly used for more than just making and receiving calls and text messages. Downloads of video clips, ringtones, street directories, restaurant guides and similar content are now commonplace services. It is necessary to consider the specific risks and responsibilities assumed by each party in such arrangements to determine whether gross inflows should be recorded as revenue by the telecom.

In our experience, typically the telecom does not acquire the content rights and instead earns a commission based on user access to the content, e.g., news feeds or sports highlights, resulting in the telecom recognising only the commission received. Telecoms often provide subscribers access to several Internet search engines through their wireless network; airtime usage or data access fees are charged by the telecom for these services and are recorded as revenue.
Example 10.1
Concert organisers offer the subscribers of telecom T1 a 10 percent discount on music CDs purchased through the wireless network. T1 is responsible for providing a link to the music company's Web site and earns 2 percent on the price of each CD purchased through its network. Since T1 does not bear the inventory risk and does not have the discretion to set prices for the CDs, fees received by it, representing the commission earned, are recognised on a net basis.

Mobile payments
Mobile payments, or “M Payments”, are payments made using mobile services either to directly purchase or to authorise payment for other goods and services. In developed economies, often this is for incidental and low-value purchases such as from vending machines or for car parking. However, in emerging economies M payments can be the means to provide currency exchange and cash transfer facilities to large parts of the population that previously did not have access to banking facilities. Although whether a telecom is acting as principal or agent in this chain will vary depending on the contractual arrangements in place, typically we would expect the telecom to be an agent in the transaction.

Call transmission
For any individual end-to-end transaction, a number of different telecoms may be involved, each earning a share of the revenues. This is particularly relevant for long distance or international calls in which some telecoms may be providing “transit” services only, being neither the originator nor terminator of the call. The question is whether it is appropriate for any of those involved in the transaction to record revenues on a gross basis.

Although a conclusion will depend on the facts and circumstances of each arrangement, in our experience the following indicators are useful to consider:

- Does the telecom control decisions on the routing of traffic?
- Is the telecom involved in determining the scope of services provided?
- Do end customers have claim over the telecom for service interruption or poor quality of transmission?

Interconnect arrangements
Both fixed-line and mobile telecoms may enter into a number of interconnect agreements with other carriers. These agreements allow telecoms to terminate traffic on their respective networks and to provide end-to-end routing of voice and data traffic. In certain cases rates may be regulated, although for a number of international arrangements telecoms are free to set and revise rates as the market dictates.

Net cash settlement
In our experience, industry practice is for interconnect revenues to be recorded gross on the basis that the carriers are exposed to the gross risks of the transaction. Interconnect agreements usually allow carriers to settle on a net basis and some telecoms seek to further reduce their exposure to other carriers by entering into arrangements that give them the legal right of offset. However, this does not necessarily change the appropriateness of recognising transactions gross in profit or loss, even if periodic cash settlement may be made on a net basis. For example, a telecom may bear the gross credit risk for non-payment and be obliged to make payments under interconnect arrangements, irrespective of the level of reciprocal revenues due. Typically the agreements require careful consideration in determining whether revenue should be presented on a gross or net basis.

Regardless of the presentation in profit or loss, often the offset of payables and receivables in the statement of financial position is appropriate because the contracts permits net settlement and the parties agree to settle on a net basis.

Predetermined volumes
In some cases carriers enter into arrangements whereby the rates and amount of traffic to be carried by each party are established upfront. The substance of the transaction is that the entities agree to exchange services with the likelihood of any net cash settlement being remote. However, the existence of predetermined volumes does not change the key indicators (see above) in deciding whether to recognise revenue on a gross or net basis. In particular, predetermined volumes in themselves do make net presentation a more likely outcome.
**Peering arrangements**

Many Internet-based businesses enter into peering agreements under which they obtain access to other telecom networks. A smaller Internet provider that connects to a major network might pay a fee, but arrangements between similar “Tier 1” telecoms usually are not fee-based. Instead the agreement may simply allow reciprocal access to each other’s network.

In our experience, peering arrangements between Tier 1 telecoms do not result in the recognition of revenue even though a service is provided and value is transferred between telecoms in much the same way as under traditional interconnect arrangements. One of the reasons for not recognising revenue is an application of the principles in SIC–31 *Revenue – Barter Transactions Involving Advertising Services*. By analogy, this interpretation effectively prohibits the recognition of revenue unless the company has non-barter transactions that:

- involve peering arrangements similar to the peering arrangement in the barter transaction;
- occur frequently;
- represent a predominant number of transactions and amount when compared to all transactions to provide peering arrangements that is similar to the peering arrangement in the barter transaction;
- involve cash and / or another form of consideration, e.g., marketable securities, non-monetary assets, and other services, that has a reliably measurable fair value; and
- do not involve the same counterparty as in the barter transaction.

**Revenue-sharing arrangements**

Revenue-sharing arrangements are common in the telecoms industry, especially when a number of different telecoms are involved in providing one larger end-to-end customer solution. The search for new revenue streams and greater means of differentiation, for example among telecoms, has resulted in a wide variety of deals being struck with content providers and handset manufacturers. Agreements can be complex and vary significantly. Accounting issues include not only identifying whether the relevant party is acting as principal or agent in the arrangement, but also when to recognise the revenue or cost, and whether the arrangement is a joint venture.

**Premium rate services**

Premium rate services, in which the caller pays a premium to the standard call rate to access additional services, are common. These can include directory inquiry services, chat lines, other information services, or a voting service on a television game show. In a simple case, there may be three parties involved: the caller, the telecom and the end-service provider. The telecom normally will charge the end user a set rate per minute or per call and pass on an agreed amount to the service provider.

Whether revenue should be recognised gross or net depends on the facts and circumstances of specific contractual arrangements. For example, in some cases, such as with some directory inquiry services, the telecom is actively involved in providing the service rather than simply delivering a finished product. In such cases revenue would be recognised on a gross basis, although this depends on the facts and circumstances of specific contractual arrangements. In other cases the telecom effectively rents out a range of numbers to a service provider and agrees to receive a fixed fee from the service provider for each call made to those numbers. In such cases we would expect revenue to be recognised on a net basis. However, once again this depends on the facts and circumstances of specific contractual arrangements.

**Sales taxes and excise duties / levies**

Revenue does not include sales taxes, value added taxes (VAT) or goods and service taxes when the entity is acting as a collection agent on behalf of the tax authorities. Similarly, other amounts collected on behalf of government bodies or agencies, such as excise duties or levies would also be excluded from revenue.

IFRSs do not address specifically the accounting for such taxes or duties/levies. In our view, the appropriate accounting treatment will depend on whether the telecom is acting in a manner similar to that of an agent or a principal under the local regulatory requirements in relation to the tax, duty or levy.

In practice, this might lead to different accounting by telecoms within a multinational group, as the approach taken should vary depending on the different tax / duty regimes in various jurisdictions. Depending on how the legal or regulatory
requirements are applied, the determination of whether a telecom is acting as an agent or principal may require significant judgement.

**Example 10.2**

**Scenario 1**
The government telecoms authority levies an excise tax on each telecom based on a fixed annual amount per subscriber. The excise tax is levied regardless of whether the end subscriber actually pays their monthly service bill. In this example it appears that the telecom is not acting as a collection agent of the government as it is exposed to the excise tax as a principal, i.e., the excise tax is simply another cost to be recovered whenever possible in the pricing of the services. Accordingly, we would expect the revenue to be the gross amount charged to customers (i.e., including any amounts charged to recover the excise tax), with the actual excise tax payable being included in operating expenses.

**Scenario 2**
As in scenario 1, the government telecom authority levies an excise tax on each telecom based on a fixed annual amount per subscriber. However, the excise tax is refundable by the authority if the end subscriber fails to settle their debt. In this example it appears that the telecom is acting as an agent of the government. Accordingly, revenue recognised by the telecom excludes the excise tax charged to customers. Instead, any amounts collected for the excise tax are recorded as a payable until remitted to the government.
Capacity transactions

Telecoms operate in a capital-intensive industry in which significant set-up costs are incurred in respect of the network infrastructure required to operate, for example setting up mobile towers and laying fibre optic or copper cables.

It is common for telecoms that own excess network capacity to enter into arrangements whereby they convey to another telecom the “right to use” equipment, fibres or capacity (bandwidth) for an agreed period of time, in return for a payment or a series of payments. In relation to such capacity transactions, telecoms can be either providers (sellers) or customers or both. The capacity seller usually retains ownership of the network assets and conveys the “right to use” the asset to the customer for an agreed period of time. An agreement that conveys the exclusive right to use is referred to as an “indefeasible right of use” (IRU). Accounting for IRUs can be complex, requiring a detailed analysis of the substance of the arrangement, and exchanges or swaps of capacity add further complexity to this topic.

The following decision tree provides a framework to assist telecoms in dealing with the accounting for the IRU component within an arrangement. This is explored further in Questions 11 to 14:
Q11. What is the framework for determining whether an indefeasible right of use (IRU) is a lease?

IRU contracts may not be described explicitly as lease contracts, but what matters is the substance of the agreement, which should be evaluated to determine whether it constitutes or contains a leasing arrangement. This analysis is carried out in accordance with IFRIC 4 Determining whether an Arrangement contains a Lease, and the following basic questions are used to assess whether such arrangements constitute or contain a lease in accordance with IFRIC 4:

- Does the provision of a service depend on the use of one or more specific assets?
- Does the arrangement convey a right to use these assets?

The following decision tree highlights further the criteria used to assess whether an arrangement is or contains a lease:

In determining whether an IRU is a lease, generally it is not difficult to determine whether a “right to use” is being conveyed under the agreement. However, difficulties do arise in identifying whether a specific asset is being used, which is explored in Question 12.
Q12. Can capacity be a separately identifiable asset?

Some arrangements convey to the customer the right to use a specific identifiable physical asset, for example, by transferring to the customer rights over all of the capacity associated with an identifiable physical asset. However, more complex arrangements exist in practice; for example, some arrangements convey to a telecom the exclusive right to use a particular wavelength or a certain amount of strands of capacity on a network system to carry its traffic on a particular route. Other arrangements do not specify the asset to be used and only state that a certain amount of capacity within the overall infrastructure is available for the use of the customer. In such cases it is necessary to consider whether the arrangement relates to a separately identifiable asset.

Although IFRIC 4 does not define “specific asset”, it does state that if the entity has the right and ability to provide goods / services using other assets not specified in the arrangement, then fulfilment of the arrangement is not dependent on the specified asset and the arrangement does not contain a lease.

In order to determine whether an arrangement relates to a specific asset, it is necessary to determine the unit of account in the arrangement. In this regard IFRIC 4 refers to IAS 16 Property, Plant and Equipment and IAS 38 Intangible Assets for further guidance. IAS 38 states that a “separable asset” is an item that is capable of being separated or divided from the entity and sold, transferred, licensed, rented or exchanged, either individually or together with a related contract, identifiable asset or liability, regardless of whether the entity intends to do so. Therefore, in our experience, a right to use capacity can represent an asset separate from the underlying physical asset, such as a cable.

In some cases IRU arrangements specify the specific asset to be used in the arrangement, such as a specific wavelength or wave colour. This may be specified in the contract or allocated once the capacity is activated, but importantly the asset can be specifically identified rather than representing a unit of capacity on a larger asset.

In our experience, when capacity sold as part of an IRU arrangement is specifically assigned to a lessee and represents an exclusive right over a separately identifiable asset such as a specific wavelength, the arrangement may meet the requirement that it relates to a specific asset for the purpose of applying IFRIC 4, such that the arrangement contains a lease (see Question 11).

However, there is an alternative view that the right to use an asset cannot be separated from the underlying physical asset and therefore does not represent a separate unit of account; accordingly, these arrangements would be accounted for under IAS 18 Revenue.

Example 12.1

Telecom T1 is building a new submarine cable system in the Pacific Ocean and incurs costs towards installing the cables, the right of way agreement and other fees of the jurisdiction through which the cable runs. T1 recognises the cable system as an item of property, plant and equipment (see Questions 22 to 26).

Telecom T2, a small telecom operator, enters into an agreement for the exclusive, unrestricted and indefeasible right to use a specific wavelength on the above cable system between points A and B, representing 40 percent of the T1’s total capacity. The agreement identifies the submarine cable system in the Pacific Ocean that T2 has the exclusive right to use. Accordingly, it is concluded that the agreement is for the use of a specific asset, namely the wavelength (see Question 11).

As part of the IRU, T2 holds privileges generally associated with ownership of the 40 percent share. It could sublease the capacity to another operator. Further, T2 controls the access to the capacity leased from T1 through a security password that is known only to T2. The IRU is for a period of 20 years, which equates to the estimated useful life of the cable, and T2 agrees to pay a lump-sum amount to T1 for the use of the capacity.

In this example, since the agreement specifies the underlying asset that will be available to T2 to use and conveys the right to use the asset for T2’s exclusive traffic, the IRU is classified as a lease under IFRIC 4 (see Question 11).

However, under the alternative view whereby the right to use is not considered to be separable from the underlying physical asset, the arrangement would be accounted for under IAS 18.
Q13. How is an IRU that is a lease classified?

Once it has been determined in accordance with IFRIC 4 that an IRU is or contains a lease (see Questions 11 and 12), then the arrangement is accounted for in accordance with IAS 17 Leases.

In accordance with IAS 17, a telecom determines, based on the terms of the contract, whether the lease is a finance lease or an operating lease. A finance lease is defined as a lease that transfers substantially all of the risks and rewards incidental to ownership of the leased asset from the lessor to the lessee; title to the asset may or may not transfer under such a lease. An operating lease is a lease other than a finance lease.

Primary indicators under IAS 17 that, individually or in combination, normally would lead to a lease being classified as a finance lease are as follows:

- Ownership transfers by the end of the lease.
- The agreement includes a purchase option that is reasonably certain, based on facts and circumstances at inception of the lease, to be exercised (bargain purchase option).
- The lease term is for the major part of the economic life of the asset even if title is not transferred.

IFRSs do not define what is meant by the “major part” of an asset’s economic life. Practice has been to look to the lease accounting guidance in U.S. GAAP, which has quantitative criteria about what is considered to be the majority of an asset’s economic life. U.S. GAAP has a “bright-line” threshold whereby a lease term equivalent to 75 percent or more of the economic life of an asset is considered to be the major part of the asset’s economic life. Practice under U.S. GAAP requires a lease that is very close to, but below this bright-line cut-off (e.g., a lease term equivalent to 74 percent of the asset’s economic life) to be classified as an operating lease if none of the other criteria for finance (capital) lease classification are met. In our view, while this 75 percent threshold may be a useful reference point, it does not represent a bright-line or automatic cut-off point under IFRSs. We believe that it is necessary to consider all relevant factors when assessing the classification of a lease and it is clear that some leases may be for the major part of an asset’s economic life even if the lease term is for less than 75 percent of the economic life of the asset.

- At inception of the lease, the present value of the minimum lease payments amounts to substantially all of the fair value of the leased asset.

IFRSs do not define what is meant by “substantially all”. U.S. GAAP has a bright-line threshold whereby if the present value of the minimum lease payments is 90 percent or more of the fair value of the leased asset at inception of the lease, then the lease should be classified as a finance lease. Practice under U.S. GAAP requires a lease that is very close to this bright-line cut-off (e.g., 89 percent) to be classified as an operating lease if none of the other criteria for finance lease classification are met. In our view, while the 90 percent threshold may provide a useful reference point, it does not represent a bright-line or automatic cut-off point under IFRSs.

- The leased asset is of a specialised nature, for example a mobile tower, and only the lessee can use it without major modification.

Supplemental indicators of a finance lease, among others, include:

- the lessee can cancel the lease, but the lessor’s losses associated with the cancellation are borne by the lessee;
- gains or losses from fluctuations in the fair value of the residual fall to the lessee, for example in form of a rent rebate; and
- the lessee can extend the lease at a rent that is substantially lower than the market rent.

In our experience, it is common for telecoms to enter into IRU arrangements that exceed the major part of the economic life of the asset and/or in which the present value of the minimum lease payments amounts to substantially all of the fair value of the leased asset.

However, lease classification should be based on an overall assessment of whether substantially all the risks and rewards of ownership of the leased asset have been transferred from the lessor to the lessee. This will include consideration of the indicators listed in IAS 17 and other relevant aspects of the arrangement.
Example 13.1
Continuing Example 12.1, the following discusses the impact of certain terms of the IRU on its classification as a finance or operating lease, based on our experience:

- If telecom T2 (lessee) bears the risk that the capacity subject to the IRU does not perform at the level specified in the operating agreement, then this may indicate that the IRU is a finance lease. Conversely, if telecom T1 (lessor) warrants a specific level of performance in excess of that provided by the operating agreement, or is obliged to pay T2 when performance is below the specified threshold, then this may indicate that the IRU is an operating lease.
- If telecom T2 does not use all the capacity it has purchased and telecom T1 is able to use that spare capacity to carry third-party traffic, then T1 has retained rewards associated with the capacity, which indicates that the IRU is an operating lease. More fundamentally, if T1 retains rights to allocate capacity between T2 and other third parties, then this may indicate that T1 is only providing a service, which is the delivery of traffic on its network, and the transaction is not within the scope of a lease and will be accounted for as a service arrangement by T1 and an operating expense by T2 (see Question 12).
- If telecom T1 has guaranteed the value of the capacity in the event of technological obsolescence, or provides for the exchange or swap of capacity part way through the agreement, then T1 has retained risks associated with the future value of the IRU, which may indicate that the IRU is an operating lease.
- If, in the event that the cable is damaged beyond repair, there is no recourse to telecom T1 by telecom T2, then T1 has transferred risk to T2, which may indicate that the IRU is a finance lease. Conversely, if T1 would be required to reroute traffic or otherwise incur costs to provide the contracted capacity to T2 should such damage occur, then this indicates that T1 has retained the risk.

In our experience, determining whether an arrangement is or contains a lease, and assessing the classification of any leases identified, can be complex and requires the exercise of judgement.

For an IRU transaction that satisfies the requirement of being accounted for as a finance lease, the lessor records the transaction as a sale. The lessor recognises revenue in accordance with IAS 18 if the transaction is in the course of the ordinary activities of the telecom; otherwise the telecom recognises the gain on the transaction (i.e., proceeds less cost) on a net basis in profit or loss.

A lessor that receives a lump-sum payment from the lessee at the inception of the arrangement records the entire amount received as a sale. However, if the lessor receives some portion of the total consideration upfront and the remaining portion over a period of time, then the lessor recognises finance income on the portion of consideration received subsequently.

Example 13.2
Continuing Example 12.1, if selling excess capacity on network systems is part of telecom T1’s ordinary activities and it regularly enters into such transaction as part of its overall corporate strategy, then the income from the IRU is presented as revenue.

For an IRU transaction that satisfies the requirement of being accounted as an operating lease, the lessor continues to recognise the asset and recognises rental income from the lessee on a straight-line basis over the term of the lease. Similarly, the lessee recognises rental expense to the lessor on a straight-line basis over the term of the lease.

When the arrangement does not contain a lease, then typically the seller applies IAS 18, under which revenue under the arrangement is recognised either under the sales of goods contract or under the service contract. In our experience, generally these arrangements satisfy the requirements of a service contract, and revenue from the IRU transaction typically would be recognised on a straight-line basis over the term of the arrangement. It may also be possible to recognise revenue using another systematic basis if that is more representative of the pattern in which the telecom satisfies its performance obligations under the arrangement.
The telecom (lessor) may include the operating and maintenance costs either as a separate component of the arrangement and price it separately, whereas more complex arrangements may include the operating and maintenance costs in the overall lease cost. IAS 17 should be applied only to the lease element of the arrangement; other elements, such as the operating and maintenance costs, should be accounted for in accordance with other standards. Accordingly, for IRUs that include the operating and maintenance costs, we would expect payments to be separated at inception of the agreement into the IRU and operating and maintenance components, based on relative fair values.
Q14. What is the accounting treatment for the exchange of IRUs?

Leveraging on each other’s networks, telecoms sometimes enter into transactions with peers for the exchange of capacity, also referred to as “capacity swaps”.

All property, plant and equipment and intangible assets received in exchange for non-monetary assets are measured at fair value unless the exchange transaction lacks commercial substance or the fair value of neither the asset received nor the asset given up is reliably measurable.

Commercial substance is assessed by considering the extent to which future cash flows are expected to change as a result of the transaction. More specifically, an exchange transaction has commercial substance if the configuration of the cash flows (i.e., the amount, timing and uncertainty) of the assets received and transferred are different, or if the entity-specific value of the portion of the telecom’s operations affected by the transaction changes as a result of the exchange. The difference in both of the above situations should be significant when compared to the fair value of the assets exchanged. A telecom’s assessment of commercial substance is further strengthened when the capacities purchased and sold are being used in operations rather than to inflate revenues artificially.

If a fair value can be determined reliably for either the asset received or the asset given up, then the fair value of the asset given up should be used unless the fair value of the asset received is more clearly evident. In our experience, it is rare for telecoms to find exactly matching transactions for the purpose of determining fair value, as typically the terms differ even for capacity sold on the same cable. However, usually fair value can be determined by reference to similar transactions after adjusting for differences in contract terms.

Example 14.1

Telecom T1 enters into an agreement with telecom T2 to purchase the excess 25 percent capacity of T2’s domestic backbone network in exchange for 25 percent of its own submarine-based cable network. The purpose of the exchange, is to allow each telecom to serve their respective customers.

In order to recognise the exchange transaction, T1 would have to satisfy the criteria that the above transaction has commercial substance and that the fair value can be measured reliably.

When establishing commercial substance, T1 should be able to demonstrate that future cash flows arising from the use of T2’s domestic backbone network as compared to the future cash flows from the use of its own cable-based network are expected to be significantly different.

In determining fair values, T1 generally would determine the fair value of the transaction based on other IRUs that it has entered into with other telecoms on a stand-alone basis with similar capacity, giving consideration to differences in the contract terms and the variability in cash flows.
Intangible assets

Accounting for intangible assets is especially pertinent in the telecoms sector. The amount spent on the acquisition of 3G licences attracted huge publicity and resulted in billions of dollars of intangible assets being recognised on the statements of financial position of major telecoms, in Europe in particular. Unfortunately revenue growth expectations often were not met, and the acquisitions were followed by large impairment losses for many telecoms. Although licences are still a part of the telecoms sector, for example for WiMax technology, focus is shifting to acquired content as “convergence” becomes the industry buzzword.

Another significant issue for the telecoms sector is the treatment of costs incurred in obtaining new contracts with customers. The key principle to bear in mind is that amounts cannot be capitalised unless they meet the definition of and recognition criteria for an intangible asset.

Lastly, the general level of intangible assets recognised in the statements of financial position of telecoms is increasing as the industry consolidates and intangible assets acquired in a business combination are recognised separately from goodwill. These intangible assets often include internally developed software and customer relationships, trademarks and brands.
Q15. What are the general principles for the recognition of intangible assets?

In order to be recognised as an intangible asset, an item should meet both the definition of an intangible asset and the recognition criteria; application of the latter vary depending on whether the item was acquired separately, acquired in a business combination or developed internally.

**Definition**

To meet the definition of an intangible asset, an item should lack physical substance and should be:

- identifiable;
- non-monetary; and
- controlled by the telecom and expected to provide it with future economic benefits, i.e., it should meet the definition of an asset.

These criteria apply to all intangible assets, whether acquired separately, acquired in a business combination or developed internally.

**Identifiable**

An intangible asset is *identifiable* if it:

- is separable, i.e., is capable of being separated or divided from the telecom and sold, transferred, licensed, rented or exchanged either individually or together with a related contract, asset or liability; or
- arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations.

Therefore separability is a sufficient but not a necessary condition for an item to be identifiable. For example, a wireless spectrum licence is identifiable because it arises from legal rights, even though the licence usually may not be separable from the mobile base station or network infrastructure needed to operate it.

**Control**

In order to demonstrate control a telecom should have the power to obtain the future economic benefits arising from the item and be able to restrict the access of others to those benefits.

**Example 15.1**

Telecom T has two key resources: customised software that it developed internally and for which a patent is registered; and the “know-how” of the staff that operate the software. Staff are required to give one month's notice of their resignation. It is clear that T controls the software. However, although it obtains economic benefits from the work performed by the staff, T does not have control over their know-how because staff could choose to resign at any time. Therefore the workforce does not meet the definition of an intangible asset.

**Recognition**

An intangible asset that meets the following criteria is recognised initially at cost:

- it is probable that future economic benefits that are attributable to the asset will flow to the entity; and
- the cost of the asset can be measured reliably.

The “probability” recognition criterion always is considered to be satisfied for intangible assets acquired separately or in a business combination. This assumption is not made in respect of intangible assets developed internally.

The cost of an intangible asset acquired in a separate transaction is the cash paid or the fair value of any other consideration given. The cost of an internally generated intangible asset includes the directly attributable expenditure of preparing the
asset for its intended use. Expenditure on training activities, clearly identified inefficiencies and initial operating losses are expensed as incurred.

The cost of an intangible asset acquired in a business combination is its fair value. Fair value reflects a market participant’s view about the probability of future economic benefits. Fair value may be established using valuation techniques if there is no active market for the acquired intangible, which often is the case. For business combinations entered into in annual periods beginning on or after 1 July 2009, there is no exemption from recognising an intangible asset separately from goodwill on the basis that its fair value cannot be measured reliably; effectively this means that if the definition of an intangible asset is met, then the intangible asset is recognised separately in the acquisition accounting.
Q16. To what extent can customer acquisition costs be capitalised?

Customer acquisition (or origination) costs are the directly attributable costs incurred in signing up a new customer. The costs of adding subscribers to a company’s customer base can be substantial and complicated by the type of costs involved, including incentives to retailers, commissions paid to external dealers or agents, and sales commissions to the telecom’s staff. However, such costs do not include negative margins on subsidised handset sales.

The following illustration depicts in general terms the treatment of customer acquisition costs arising from sales incentives:

Amounts paid to a party other than the customer

Customer acquisition costs paid to a party other than the customer include commissions paid to internal or external sales personnel. Such costs commonly are referred to as subscriber acquisition costs and are capitalised as intangible assets if the definition and recognition criteria are met. In the context of subscriber acquisition costs, the key criteria are that the telecom has control over the underlying asset, which is the right to receive revenues from the contract, and it is probable that future economic benefits will arise from the contract.
In determining whether these tests are met, the nature of the contract is key. Although contracts may have different features, broadly they can be considered as either fixed-term contracts (i.e., contracts that require a minimum purchase) or open-ended contracts (i.e., contracts that do not include any such obligations). In our view, generally an intangible asset is recognised only to the extent that it arises from:

- a fixed-term contract that requires a minimum consideration;
- an open-ended contract that includes a cancellation penalty that the telecom would have the intent and ability to enforce.

In both cases the amount capitalised as subscriber acquisition costs should not exceed the minimum consideration expected. The history of past customer relationships should not be taken into account in determining whether an asset exists, as historical experience for a portfolio of such contracts does not mean that a specific customer can be compelled to make a purchase in the future. Therefore, in our view, subscriber acquisition and other incremental costs related to obtaining open-ended contracts without a historically enforced cancellation penalty, generally should be expensed as incurred.

When these capitalisation criteria are met, internal or external subscriber acquisition costs should be recognised as intangible assets provided that they are incremental to the contracts, i.e., they would not have been incurred had the contracts not been entered into, and they can be measured reliably.

Example 16.1
The sales staff at Telecom T receive a fixed salary. In addition to their salary, they are paid commission if they sell more than 50 subscriber agreements that have a minimum duration of one year.

Only the commission that is received from the 51st subscriber agreement is an incremental costs that is eligible for capitalisation. Salary costs should not be capitalised because the salaries are not paid only for the acquisition of agreements but also for the staff's (possibly unsuccessful) efforts to sell such agreements.

Amounts paid to the customer directly
In our view, payments (in cash or in kind) that an entity makes directly to a customer upon entering into a contract are not subscriber acquisition costs, which are transactions with parties other than the customer itself. We believe that normally such payments represent incentives to motivate the customer to enter into a contract and should be accounted for as a reduction in the consideration received or receivable under IAS 18, i.e., like other sales incentives such as discounts. This is discussed in Question 7.

However, an issue nonetheless arises as to the appropriate treatment in the statement of financial position prior to recognition in profit or loss. In that case, using the flowchart in Question 16, there are three scenarios:

- cash is given to the customer;
- the customer receives a benefit in kind (e.g., equipment installed in the customer's home) that is not a separate component of the transaction; and / or
- the customer receives benefit in kind that is a separate component of the transaction.

Cash is given to the customer
As noted in Question 7, cash incentives are recognised as a deduction from revenue. In these circumstances the telecom recognises an asset prior to recognition in profit or loss if it is probable that the economic benefits of the transaction will flow to it. In some cases the asset will be a financial asset because the telecom has a contractual right to receive payment from the customer. However, in other cases the asset might be recognised on the basis that the telecom has the right to receive revenues from the contract.

Similar to subscriber acquisition costs, in our view generally an asset can be recognised only to the extent that it arises from:

- a fixed-term contract that requires a minimum consideration at least equal to the amount paid by the telecom;
an open-ended contract that includes a cancellation penalty sufficient to recover the amount paid that the telecom would have the ability and intention to enforce.

**Benefit in kind is given to the customer**

To the extent that a benefit in kind is given to the customer and it is concluded that it does not represent a separate component of the arrangement (see Question 3), then typically we would expect the cost of the benefit to be recognised as an expense in the appropriate periods. An asset is recognised in the statement of financial position under the same circumstances as cash given to the customer.

To the extent that the benefit in kind is a separate component of the arrangement, it will be recognised as a cost of sale when it is delivered and there would be no deferral in the statement of financial position.

**Example 16.2**

Telecom T runs a promotion in which new customers who sign a two-year contract receive a “free” handset. The contract requires the customer to pay a cancellation fee of 300 if they cancel the contract. There is a one-time “activation fee” of 50 and a monthly fee of 40 for the ongoing service.

The same monthly fee is charged by T regardless of whether a “free” handset is provided. The handset costs T 100, and T frequently sells the handset separately for 120. T is not required to refund any portion of the fees paid for any reason. T is a sufficiently capitalised, experienced, and profitable business and has no reason to believe that the two-year service requirement will not be met. T intends and is able to enforce the cancellation fee of 300.

The arrangement consideration of 1,010 (50 + (24 x 40)) is allocated to the separately identifiable components as follows: handset 112; phone service 898. The allocation is explained in Example 4.1, which is the basis for this example.

T records the following entries during the first month of the contract:

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash (50 + 40)</td>
<td>90</td>
</tr>
<tr>
<td>Accrued revenue</td>
<td>59</td>
</tr>
<tr>
<td>Revenue (sale of handset)</td>
<td></td>
</tr>
<tr>
<td>Revenue (phone service) (898/24)</td>
<td>112</td>
</tr>
<tr>
<td>To recognise cash received and revenue for the month</td>
<td>37</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td></td>
</tr>
<tr>
<td>Inventory</td>
<td>100</td>
</tr>
<tr>
<td>To derecognise handset from inventory</td>
<td>100</td>
</tr>
</tbody>
</table>

In some cases the above accounting may result in a loss being recognised upon the sale of the handset. In our view, recognition of a loss is appropriate when the revenue has been allocated to components of the arrangement following the guidance outlined in Question 4. There is no basis under IFRSs to carry forward an operating loss arising from a transaction that already has occurred.

Additionally, if a telecom has significant levels of handsets in inventory that it intends to dispose of at a loss, then this raises questions about whether the handsets are recognised appropriately at the lower of cost and net realisable value in accordance with IAS 2 *Inventories.*


**Deferral of amounts payable**

In some cases commissions are payable to third-party dealers in connection with the acquisition of new customer relationships and providing services to new and existing customers. A question that often arises is whether to recognise a liability at the point of customer acquisition for estimated future amounts payable or whether to recognise the amounts as they become determined in the future. In considering this issue, the following matters may need to be analysed:

- What service is being provided by the dealer and when does the dealer provide that service?
- Is the deferral of payments to a dealer over an extended period of time done primarily for cash flow purposes or is it because the dealer continues to have an involvement in providing services to the customer?
- Is the payment contingent on a future event or activity, for example the customer remaining a subscriber or achieving a specified monthly spend?
- Can the entity avoid future payments by its own future actions and decisions?

An analysis of these issues will help establish whether, for example, there is a liability to be recognised at the point of customer acquisition or whether there is an executory contract requiring the dealer to perform further services or meet other qualifying conditions in order to earn the payments.

If an entity concludes that it is appropriate to recognise a financial liability at the point of customer acquisition, then this would initially be recorded at fair value with the debit entry booked as an intangible asset, representing the customer relationship acquired. Any subsequent changes or updates in the amount of the liability thereafter would be recognised in profit or loss. When amounts payable relate to ongoing services that are performed over time, these payments usually would be expensed as the services are received.
Q17. How are acquired licences accounted for?

A licence potentially could be accounted for in two different ways:

- as a lease, on the basis that it represents the right to use another entity’s asset for an agreed period of time in return for a payment or series of payments; or
- as an intangible asset, on the basis that the licence is an intangible resource of the licensee itself.

The leasing standard, IAS 17 *Leases*, excludes from its scope licensing agreements for items such as motion picture films, video recordings, plays, manuscripts, patents and copyrights. However, since licences grant a right of use and because IAS 17 does not state clearly that all licence arrangements are excluded from its scope, it can be difficult to determine whether a licence should be accounted for as a lease or an intangible asset. In our experience, generally licences are accounted for as intangible assets, which is the basis of the discussion that follows.

An acquired licence is recognised initially at its cost. While typically the determination of cost is a straightforward exercise, the issue becomes more complicated when the consideration is wholly or partly variable depending on the level of future revenues. In our view, the cost of the intangible asset excludes amounts that are contingent upon future revenues because the revenue-based payments do not represent a present obligation. Instead, such contingent amounts generally should be recognised as an expense as incurred.

**Example 17.1**

Telecom T purchases a five-year licence to use technology owned by Company Z. T agrees to pay a minimum amount of 200:  
- 50 is due at the outset of the licence arrangement; and  
- 150 is due one year later.

In addition to this minimum payment, T also agrees to pay to Z 10 percent of the future revenues that will be generated with the licensed technology.

T’s current best estimate of the revenues expected to be generated with the technology is 1,000 for each of the following five years, resulting in expenditure of 500 (1,000 x 5 x 10%). Over the period of the licence, T actually earns revenue of 1,200 related to the use of the technology.

T records the following entries in relation to the purchase of the licence:

<table>
<thead>
<tr>
<th>Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intangible asset (licence) (50 + 150) Cash / payable</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>To recognise licence – the effect of discounting the 150 to determine its present value is not illustrated in this example</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit or loss (1,200 x 10%) Cash / payable</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>To recognise licence fees as they become payable</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q18. To what extent can the costs of internally developed intangible assets be capitalised?

Specialised and bespoke technology often is central to the operations of many telecoms and therefore it is common for telecoms to incur significant internal development costs in the design and development of software and other intangible assets.

When a telecom develops an intangible asset internally, such as billing system software, it follows the accounting requirements for research and development expenditure:

- All expenditure incurred during the research phase of the project is expensed as incurred.
- Qualifying expenditure incurred during the development phase of the project is capitalised from the point that the telecom can demonstrate:
  - the technical feasibility of completing the intangible asset so that it will be available for use or sale;
  - its intention to complete the intangible asset and use or sell it;
  - its ability to use or sell the intangible asset;
  - how the intangible asset will generate probable future economic benefits, e.g., the usefulness of the billing system;
  - the availability of adequate technical, financial, and other resources to complete the development and to use or sell the intangible asset; and
  - its ability to measure reliably the expenditure attributable to the intangible asset during its development.

Qualifying expenditure includes all expenditure directly related to preparing the billing system for use, although such expenditure need not be incremental. However, the following costs are prohibited from being capitalised:

- selling, administrative and other general overhead expenditure unless this expenditure can be directly attributed to preparing the asset for use;
- identified inefficiencies and initial operating losses incurred before the asset achieves planned performance; and
- expenditure on training staff to operate the asset.

The third exclusion (training) is particularly important for telecoms, and cannot be overcome by buying a billing system from a third party inclusive of training. In that case we would expect a portion of the cost of the system to be attributed to training and expensed as the training occurs.

As an example, the following table outlines the typical costs incurred in developing a billing system, and the likely accounting treatment.

<table>
<thead>
<tr>
<th>Costs</th>
<th>Capitalise?</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needs assessment and cost of assessing the requirements of a new billing system and evaluating three potential billing system software products</td>
<td>No</td>
<td>Represents costs incurred towards the search for, evaluation and final selection of, possible alternatives. Such costs should be expensed as incurred.</td>
</tr>
<tr>
<td>Purchase costs for the chosen software system and external consulting costs for its implementation</td>
<td>Yes</td>
<td>Such costs should be capitalised once the criteria for capitalisation have been satisfied (see above). However, the nature of the external costs incurred should be considered. Certain types of costs, e.g., training of the project team by the software supplier are not eligible for capitalisation even if they represent external costs incurred related to the project implementation.</td>
</tr>
<tr>
<td>Costs</td>
<td>Capitalise?</td>
<td>Comments</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Internal direct labour costs of developing and testing the software</td>
<td>Yes</td>
<td>As discussed above, such costs include all employee benefits of those working on the project, including share-based payment costs and post-employment benefits.</td>
</tr>
<tr>
<td>External training costs for training staff on how to use the billing system. Internal labour costs related to staff training</td>
<td>No</td>
<td>IFRSs specifically prohibit the capitalisation of training costs, which should be expensed as incurred.</td>
</tr>
<tr>
<td>A proportion of the general overhead costs (property costs, stationery etc.) of the billing department, some of whose employees are working on the billing system implementation</td>
<td>Depends</td>
<td>Only costs directly attributable to the development of the billing system are capitalised. Care should be taken to ensure that administrative and general overhead costs are expensed as incurred if they are not directly attributable to the development.</td>
</tr>
</tbody>
</table>
Q19. In a business combination what intangible assets typically are recognised separately from goodwill?

In our experience, the following are some of the significant intangible assets recognised separately from goodwill in a business combination in the telecoms sector that may not have been recognised in the statement of financial position of the acquiree:

- marketing-related intangible assets;
- customer-related intangible assets;
- technology-based intangible assets; and
- in-process research and development.

**Marketing-related intangible assets**
Marketing-related intangible assets are used primarily in the marketing or promotion of products or services. They typically meet the contractual-legal criterion for identifiability (see Question 15) because generally they are protected through legal means.

**Trademarks, trade names, service marks, collective marks and certification marks**
Trademarks, trade names, service marks and collective marks are used to identify products and services and to distinguish them from other products and services. They also indicate the source of a product or service. Certification marks certify characteristics of a product or service such as its geographical origin. They may be protected legally through registration with government agencies, use over a period of time or other means. They also normally meet the separability criterion (see Question 15).

The terms *brand* and *brand name* typically refer to a group of complementary assets such as a trademark (or service mark) and its related trade name, formulas, recipes, and technological expertise. Complementary assets with similar useful lives may be recognised as a single asset separately from goodwill.

**Non-competition agreements**
Non-competition agreements are agreements that place restrictions on the ability of a person or a business to compete with another entity and, as such, meet the contractual-legal criterion for recognition as intangible assets. The restrictions generally relate to specified markets and/or specified products or activities for some period of time. These agreements may be entered into on a stand-alone basis, or may be embedded in another agreement, such as an acquisition agreement or an employment contract.

The valuation of non-competition agreements often is difficult and requires consideration of many factors, including uncertainties about enforceability and the effect of competition absent the non-competition agreement.

**Internet domain names**
An Internet domain name is a unique alphanumeric name that is used to identify a particular numeric Internet address. A registered domain name meets the contractual-legal criterion.

**Customer-related intangible assets**

**Customer lists**
A customer list consists of information about customers, such as names and contact information. It also may be a database that includes other information about customers, such as order histories and demographic information. Customer lists generally do not arise from contractual or other legal rights, but frequently are leased or exchanged. A customer list that is separable might meet the definition of an intangible asset even if the acquiree does not control the customer relationship. However, not all customer lists are separable. In some countries regulations exist that prevent an entity from selling, leasing or exchanging the information in such a list. Sometimes there are terms of confidentiality or other agreements that prohibit an entity from selling, leasing or otherwise exchanging information about its customers. The existence of such regulation or similar agreements prevents recognition as the list would not be separable in such cases.
It is important to distinguish between a customer list and a customer base. A customer list includes specific information about the customer, such as name, contact information, order history and demographic information. A customer base represents a group of customers that are neither known nor identifiable to the entity, e.g., the customers that visit a particular fast-food restaurant. A customer base does not meet the criteria for recognition separately from goodwill because a customer base meets neither the contractual-legal nor the separability criterion.

**Customer contracts and related customer relationships**

For a customer relationship to exist, (1) the acquiree should have information about the customer and regular contact with the customer; and (2) the customer should have the ability to make direct contact with the acquiree. Customer relationships are identifiable intangible assets if they arise from contractual or legal rights, or are separable. If an entity has a practice of establishing contracts with customers, then the customer relationships meet the contractual-legal criterion, irrespective of whether there is a contract in place at the acquisition date.

Care should be taken to distinguish between a customer contract and the related customer relationship as they may represent two distinct intangible assets, which may need to be recognised separately from each other.

If an entity establishes relationships with its customers through contracts, then those customer relationships arise from contractual rights and therefore meet the contractual-legal criterion. This is unaffected by confidentiality or other contractual terms that prohibit the sale or transfer of a contract separately from the acquiree. The interpretation of what is a contractual customer relationship is broad. Customer relationships may meet the contractual-legal criterion at the acquisition date even if there is no contract in place with the customer at that date, if the acquiree has a practice of establishing contracts, including through cancellable purchase orders, with customers.

**Non-contractual customer relationships**

A customer relationship that does not meet the contractual-legal criterion is identifiable only if it is separable. Separability is demonstrated if the entity has the ability to dispose of and receive proceeds for the asset, or for the asset to be disposed of as a package with a related asset, liability or related contract, but not as part of a business combination. Therefore we believe that if an asset is capable of being divided from the entity, then separability should be demonstrated by both of the following:

- There is a market for the same or similar assets to be exchanged in transactions that are not business combinations.
  - There is a market if there are exchange transactions for similar assets, or a market for licensing the use of the asset rather than selling it.
- The entity has access to this market, i.e., the entity would be able to sell its customer relationship in that market.

**Technology-based intangible assets**

Technology-based identifiable intangible assets generally comprise a set of technical processes, intellectual property, and the institutional understanding within an organisation with respect to various processes and products. They may meet either the contractual-legal criterion and/or the separability criterion. Careful analysis and consideration may be required to ensure that all identifiable technology-based intangible assets are identified, as often they are not recognised in the acquiree's financial statements. In addition, often they do not arise from contractual or legal rights, e.g., unpatented technology or databases.

**In-process research and development**

The prohibition on recognising research expenditure as an intangible asset (see Question 18) does not apply in a business combination. Therefore in-process research and development (IPR&D) is recognised separately from goodwill and measured at its fair value as of the acquisition date, if it is identifiable and otherwise meets the definition of an intangible asset. If there is uncertainty about the outcome of a project, then this will be reflected in the measurement of its fair value.
Q20. Over what period are intangible assets amortised?

An intangible asset is amortised if it has a finite useful life; indefinite-lived intangible assets are not amortised but instead are tested at least annually for impairment (see Question 30).

Classification as finite- or indefinite-lived intangible assets

General considerations

An intangible asset has an indefinite useful life when, based on an analysis of all relevant factors, there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows for the entity. Various external and internal factors need to be considered when assessing the useful life of an intangible asset.

External factors include:

- the term of any agreements and other legal or contractual restrictions on the use of the asset;
- the stability of the industry, changes in market demand and expected actions by competitors; and
- technological, commercial and other types of obsolescence.

Internal factors include:

- the expected use of the asset and required maintenance;
- dependency on other assets; and
- typical product life cycles.

When control of an intangible asset is based on legal rights, e.g., a licence that has been granted for a finite period, the useful life cannot exceed that period unless:

- the legal rights are renewable; and
- there is evidence to support that they will be renewed.

In addition, the cost of renewal should not be significant. If the cost of renewing such rights is significant when compared with the future economic benefits expected to flow to the entity from renewal, then the renewal costs represent the cost to acquire a new intangible asset at the renewal date.

Determining that an intangible asset has an indefinite useful life does not mean that its life is infinite. Conversely, an intangible asset that has no legal or contractual restrictions on its use does not mean necessarily that it has an indefinite useful life.

Example 20.1

Telecom T purchases a wireless spectrum licence that covers various regions and frequencies. Although the licence has an unlimited life, it is expected that a new technology eventually will be developed that will require different frequencies and therefore render the licence obsolete. Although the timing of such obsolescence may be difficult to determine, T expects that at some point in the future the licence will cease to generate net cash inflows. Accordingly, the licence has a finite useful life.

Brands

In our view, in assessing the useful life of a brand, a telecom should include the following factors in addition to the general factors outlined above, which are not exhaustive or necessarily in order of importance, in its assessment:

- How well and for how long has the brand been established in the market? And what has been the brand’s resilience to economic and social changes since its creation?
At what point is the brand expected to become obsolete, e.g., through a decline in market demand for the products sold under the brand, or because of the technological obsolescence of these products? Can the brand be deployed in more than one industry or with more than one technology?

Is the brand used in a market that is subject to significant, enduring entry barriers?

Is sufficient ongoing marketing effort to support the brand included in the telecom’s financial forecasts, such that benefits arising from the use of the brand are expected to be maintained in the longer term, and is this level of marketing effort economically reasonable?

Is the useful life of the brand dependent on the useful lives of other assets of the telecom? If so, what are the useful lives of those assets?

Further examples of determining whether an intangible asset has an indefinite or finite useful life are provided in the illustrative examples to IAS 38.

The events and circumstances relevant to the classification of an intangible asset as having either a finite or indefinite useful life may change over time. Therefore a telecom reviews the classification in each annual reporting period to determine whether the classification made in the past still is appropriate.

**Period of amortisation for finite-lived intangible assets**

The useful life of a finite-lived intangible asset is measured by reference to the period over which an asset is expected to be available for use by the telecom, or the number of production or similar units expected to be obtained from the asset by the telecom.

Difficulties in determining useful life do not mean that an intangible asset has an indefinite useful life; nor does it mean that its useful life is unrealistically short. For example, while a wireless spectrum licence may have an unlimited life, it is likely that new technologies will eventually be developed requiring different frequencies rendering the licence obsolete. We expect therefore that the licence has a finite life. From another perspective, the telecom should not assign an unrealistically short useful life (to avoid ongoing amortisation charges) and in general we would expect the useful life assigned to be consistent with management’s assumptions used in the budgeting process. Additionally, the useful life is reviewed at the end of each annual period.

**Example 20.2**

Continuing Example 20.1, the pace of change in the telecoms sector would indicate that the useful life of the licence should be short. However, management expects to use the licence for the next 20 years, which is reflected in its internal budgets and forecasts. Consistent with those estimates, management uses an amortisation period of 20 years.

**Commencement of amortisation**

Since the amortisation period reflects the consumption over time of the future economic benefits embodied in the asset, an appropriate approach is to commence amortisation of the licence once the network as a whole is ready to commence operations. The network licence is considered an integral part of the network infrastructure without which the entity cannot generate future economic benefits from its intended use. Prior to the commencement of amortisation, annual impairment testing would be required (see Question 30).
Q21. What methods of amortisation are acceptable?

The method of amortisation of an intangible asset with a finite useful life should reflect the pattern of consumption of the economic benefits. The method used should be reviewed at least at each annual reporting date and a change in the method applied should be accounted for prospectively as a change in estimate.

No specific method of amortisation is required to be used, and the straight-line method, the diminishing (or reducing balance) method and the unit-of-production (or sum-of-the units) method are mentioned in IFRSs as possible approaches. If the pattern in which the asset’s economic benefits are consumed cannot be determined reliably, then the straight-line method is used. In our experience, typically telecoms use the straight-line method of amortisation.

In May 2008 the IASB, as part of its annual improvements process, amended IAS 38 to delete the following sentence from the standard: “There is rarely, if ever, persuasive evidence to support an amortisation method for intangible assets with finite useful lives that results in a lower amount of accumulated amortisation than under the straight-line method.” This amendment, which is effective for annual periods beginning on or after 1 January 2009, allows more flexibility for a telecom to choose a method of depreciation that reflects the pattern of economic benefits over the life of an intangible asset.

In some circumstances a revenue-based method of amortisation may be appropriate. Under a revenue-based method, amortisation of an intangible asset is based on the revenues expected to be generated from use of that asset. In our view, such a method of amortisation should be applied only when both the related revenues can be estimated reliably and when use of such a method reflects the pattern in which the economic benefits of the asset are expected to be consumed.

In our experience, it is difficult in many circumstances to estimate reliably the expected revenues to be generated by an intangible asset over its useful life. For example, the amount and timing of revenues expected to be generated from a wireless spectrum licence may be subject to significant uncertainties even though the costs incurred in obtaining that licence are expected to be recovered. Additionally, in our view the consumption of economic benefits of some intangible assets is not best reflected by the use of such a method.

Example 21.1

For example, Telecom T acquires a licence at a cost of 200 and expects to generate revenues of 500 over its estimated three-year life as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yr 1</td>
<td>200</td>
</tr>
<tr>
<td>Yr 2</td>
<td>200</td>
</tr>
<tr>
<td>Yr 3</td>
<td>100</td>
</tr>
</tbody>
</table>

If actual revenues are equal to those expected initially and revenue-based amortisation is reflective of the pattern of consumption, then the amortisation charge for each year will be as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amortisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yr 1</td>
<td>80</td>
</tr>
<tr>
<td>Yr 2</td>
<td>80</td>
</tr>
<tr>
<td>Yr 3</td>
<td>40</td>
</tr>
</tbody>
</table>

The estimates of the timing and amount of future revenues are reviewed and revised if necessary at each annual reporting date in accordance with the requirement in IAS 38 to review the expected useful life and amortisation method. The impact on amortisation expense of a revision to estimates of future revenues is treated as a change in estimate and recognised in the current and future periods over which revenues are expected to occur. Previous amortisation would not be adjusted retrospectively.

Continuing the example, during year two T revises its estimates of future revenues as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yr 2</td>
<td>350</td>
</tr>
<tr>
<td>Yr 3</td>
<td>250</td>
</tr>
</tbody>
</table>

Accordingly, the amortisation charge in year two is calculated as follows:

Net carrying amount \((200 - 80) \times (\text{revenues in year two (350) / expected current and future revenues (350 + 250)}) = 70\).
Property, plant and equipment

While the Internet bubble may have burst, capital expenditure remains a significant cash outflow for most telecoms. In developed markets, current capital expenditure projects often are focused on fibre-to-the-home initiatives, IP telephony and WiMax. In less developed markets, the expansion of wireless networks continues, particularly in countries with limited existing fixed-line infrastructure.

It was the Internet boom that shifted the focus of evaluating share prices from traditional performance measures, such as earnings per share, cash flow and profit before tax to EBITDA (earnings before interest, tax, depreciation and amortisation) and its many variants. This in turn provided an incentive for management to capitalise as many “internal” costs, primarily labour costs, as possible. This has a favourable impact, effectively reclassifying expenditure from operating expenses (within EBITDA) to depreciation (outside EBITDA).

Following the recent turmoil in the financial markets, the analyst community has raised concerns about the relevance of these alternate variants that were used to measure the performance of telecoms. As a result, we have seen many telecoms, particularly the more profitable ones, retreating from the emphasis on EBITDA to more traditional performance measures.
Q22. What are the general principles for the recognition and measurement of property, plant and equipment?

Property, plant and equipment comprises tangible assets held by an entity for use in the production or supply of goods or services, for rental to others, or for administrative purposes, that are expected to be used for more than one period. Property, plant and equipment is accounted for in accordance with IAS 16 Property, Plant and Equipment.

Spare parts that are not used in connection with an item of property, plant and equipment of the telecom, and stand-by and servicing equipment held by a telecom, generally are classified as inventories. However, if major spare parts and stand-by equipment are expected to be used for more than one period, or if they can be used only in connection with an item of property, plant and equipment, then they are classified as property, plant and equipment.

Property, plant and equipment is recognised if, and only if, it is probable that future economic benefits associated with the item will flow to the entity and its cost can be measured reliably. Similarly, subsequent expenditure on an item of property, plant and equipment is capitalised only if it meets the general recognition criteria, i.e., it is probable that future economic benefits associated with the item will flow to the entity and the cost of the item can be measured reliably. Accordingly, costs related to the day-to-day servicing of property, plant and equipment are recognised in profit or loss as incurred.

IFRSs provide entities the option to measure a class of property, plant and equipment at fair value, if fair value can be measured reliably. Should an entity decide to adopt a policy of revaluation, then revaluations should be kept up to date, such that the carrying amount of an asset at the reporting date does not differ materially from its fair value. In our experience, generally telecoms do not have a policy of revaluing their property, plant and equipment on an ongoing basis.

However, some telecoms may have measured some or all of their property, plant and equipment at “deemed cost” upon the adoption of IFRSs. The deemed cost exemption in IFRS 1 First-time Adoption of IFRSs allows a first-time adopter of IFRSs to measure individual items of property, plant and equipment based on fair value or an indexed cost, subject to certain restrictions, without requiring ongoing revaluations after the adoption of IFRSs.

Property, plant and equipment is depreciated on a systematic basis over its estimated useful life. IFRSs require entities to review the useful life and the depreciation method applied annually, with the effect of any change being recognised prospectively as a change in estimate. IFRSs do not prescribe a particular method of depreciation, but mention the straight-line method, the diminishing balance method and the sum-of-the-units method, whichever reflects the pattern in which the benefits associated with the asset are consumed (see Question 26).

When an item of property, plant and equipment comprises individual components for which different depreciation methods or rates are appropriate, each component is depreciated separately (see Question 24).
Q23. What costs are capitalised?

Property, plant and equipment is recognised initially at cost. Cost comprises the purchase price and includes all expenditure directly attributable to bringing the asset to the location and condition necessary for its intended use. “Intended use” means being capable of operating in the manner intended by management.

The costs incurred need not be external or incremental in order to be directly attributable, although judgement may be required in assessing which costs are directly attributable. However, general or administrative costs should not be capitalised.

Cost includes the estimated cost of any obligation to dismantle and remove equipment and restore the site (see Question 25), and borrowing costs if appropriate (see Questions 27 to 29).

Feasibility studies
In some cases, telecoms will incur expenditure in carrying out a feasibility study prior to deciding whether to invest in an asset or in deciding which asset to acquire. Such expenditure is expensed as incurred because it is not linked to a specific item of property, plant and equipment. However, in our view the cost of property, plant and equipment does include expenditure that is incurred only if an asset is acquired, such as a fee paid to a broker or agent only if a suitable property is identified and purchased.

Labour costs
Labour costs typically are a large component of many telecom projects, and it is appropriate that the internal effort expended by network engineers and other in-house specialists be included in the cost of assets built.

Often there are practical complications in determining how much internal labour to capitalise. Common difficulties exist when, for example, a resource pool is used for more than one project or when there are overlaps between construction and maintenance activities. Strong project management and time recording systems therefore are important in tracking such costs and in ensuring that the proportion relating to construction and extension of infrastructure can be measured reliably.

Labour costs include employee benefits such as employer taxes, pension costs and share-based payments.

Example 23.1
Telecom T is rolling out a new 3G network and incurs a number of costs.

Existing engineer is assigned to manage installation on a full-time basis. We would expect all costs of the engineer, including all employee benefits, during the period of installation to be included in the cost of the new network. These costs are directly attributable to bringing the asset to the location and condition necessary for its intended use even though they would have been incurred absent the new project.

Contractor hired to cover existing responsibilities of engineer working on installation. The cost of hiring the contractor is 150 compared to the cost of the engineer of 100. Although the contractor does not work on the new 3G network, the incremental cost of hiring the contractor (50) is directly attributable to the new network because it would not have been incurred if the 3G network project had not proceeded. However, we would expect the first 100 of the cost of the contractor to be expensed as incurred because T already incurred a cost of 100 that would be expensed under IFRSs absent the new project.

Training
The cost of training staff is not capitalised. Even if staff training is included as part of a larger contract with a third party in connection with the acquisition or construction of property, plant and equipment, we would expect the training cost component of the contract to be expensed as the training occurs.
Redeployment of used network assets
In some cases a telecom may incur costs of redeploying property, plant and equipment, for example transceivers or radio frequency equipment. Such costs are expensed as incurred since the recognition of costs as part of the carrying amount of property, plant and equipment ceases when the item is in the location and condition necessary for it to be capable of operating in the manner intended by management.

Costs incurred for testing a newly developed network
Telecoms frequently incur expenses for testing the functionality of the network when switching from one network to the other, for example from a 2G network to a 3G network. Usually the testing is performed over two or three months as customers gradually are transitioned from the existing network to the new network. Testing costs directly attributable to getting the network asset capable of operating as intended by management generally are eligible for capitalisation as long as the costs incurred do not comprise “abnormal” amounts of wasted material, labour or other resources. A determination of what should be considered “abnormal” is subjective, but in our view the factors to consider include the level of technical difficulty involved with the construction, the scale of the project, the estimates and timelines included in the project planning, and the usual construction process for that type of asset.
Q24. What is the unit of account?

When an item of property, plant and equipment comprises individual components for which different depreciation methods or rates are appropriate, each component is depreciated separately. A separate component may be either a physical component, or a non-physical component that represents a major inspection or overhaul. An item of property, plant and equipment should be separated into parts (“components”) when those parts are significant in relation to the total cost of the item.

Component accounting is compulsory when it would be applicable. However, this does not mean that an entity should split its assets into an infinite number of components if the effect on the financial statements would be immaterial.

Certain parts of an item of property, plant and equipment of a telecom may be individually significant and therefore depreciated separately from the remainder of the item of the equipment. If a telecom has varying expectations for these remaining parts, then it should use approximation techniques to estimate an appropriate depreciation pattern for such parts to reflect the consumption pattern and/or usefulness of its parts.

Example 24.1
Telecom T buys network infrastructure for 100. The equipment consists of four components, of which two components (the cable conduit lines and the switching equipment) comprise 80 of the total cost of 100. The remaining two components (radio and transceiver equipment) have a cost of 10 each, which is considered insignificant, and they have useful lives of 4 and 6 years respectively. In our view, in this situation the radio and transceiver equipment could be combined to give a cost of 20 and a useful life of 5 years.

Although individual components are accounted for separately, the financial statements continue to disclose a single asset. For example, a telecom generally would disclose its network as a class of assets, rather than disclosing separate information in respect of the head-ends, fibre etc.

Physical components
When the component is a physical part, e.g., the fibre in a network and not labour costs, the carrying amount of the component is determined by reference to its cost.

Example 24.2
Telecom T constructs a network that has an overall useful life of 20 years; one of the components of the network is the fibre, which has an expected useful life of 15 years. The cost of the network in total is 500, which includes 400 in respect of the fibre and the balance of 100 relates to the transceiver equipment. Therefore the fibre component is measured at 400 and is depreciated over 15 years.

A telecom may acquire an asset for a fixed sum without knowing the cost of the individual components. In our view, the cost of individual components should be estimated either by reference to current market prices (if possible), in consultation with the seller or contractor, or using some other reasonable method of approximation.

Major inspection and overhaul costs
Major inspections and overhauls are identified and accounted for as a separate component if that component is used over more than one period and the telecom intends to continue to operate the asset.

When a major inspection or overhaul cost is embedded in the cost of an item of property, plant and equipment, it is necessary to estimate the carrying amount of the component. The carrying amount of the component is determined by reference to the current market price of such overhauls and not the expected future price.
**Example 24.3**

Telecom T has just acquired a network for 400. The useful life of the network is 15 years, but every three years it will undergo a major overhaul of its head-end. At the date of acquisition the cost of overhauling the head-end is approximately 80, although the cost is expected to be higher in three years’ time.

The cost of the head-end component for accounting purposes is 80, based on the current cost of an overhaul, and this amount is depreciated over the three years to the next overhaul. The remaining carrying amount, which may need to be split into further components, is 320. Any additional components would be depreciated over their own estimated useful lives.

Component accounting for inspection or overhaul costs is intended to be used only for major expenditure that occurs at regular intervals over the life of an asset. Costs associated with routine repairs and maintenance should be expensed as incurred.

**Costs to be included**

IFRSs are silent with regard to the specific costs that should be included in measuring the component attributable to major inspection or overhaul costs, i.e., whether they should be incremental and/or external costs.

**Example 24.4**

Continuing Example 24.3, the current market price to overhaul the head-end is 80. However, T’s currently-employed technicians will carry out most of the work and the external costs incurred are likely to be only 30. In our view, T should attribute the entire 80 to the component on the basis that the cost of an item of property, plant and equipment includes internal as well as external costs, and there is no requirement for the costs to be incremental.

**Relationship with physical components**

IFRSs do not address the allocation of costs to a major inspection or overhaul when the underlying asset comprises a number of physical components. One acceptable method of allocating the overhaul costs to the various components is based on their relative values.

**Example 24.5**

Continuing Example 24.3, the network comprises two physical components: the computer equipment (250) and the software (150). The overhaul will involve servicing both of these components. In reality the network would comprise a number of other components; however, the example is simplified for illustrative purposes.

The overhaul costs would be allocated between the computer equipment and the software on the basis of their relative costs as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Cost</th>
<th>Allocation Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overhaul cost</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Computer equipment</td>
<td>200</td>
<td>(250 - (250/400 x 80)</td>
</tr>
<tr>
<td>Software</td>
<td>120</td>
<td>(150 - (150/400 x 80)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>400</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Replacing a component**

The remaining portion of a component that is replaced by a new component is derecognised. In our view, the amount derecognised should be included in depreciation because the amount is in effect a revision of the estimated useful life of the overhaul.
Example 24.6

Continuing Example 24.3, T carries out the overhaul of its head-end after two years instead of three. The carrying amount of the overhaul at that date is 27 (80 - (80/3 x 2)). The actual overhaul costs are 100.

The remaining carrying amount of the component that has been replaced (27) is written off immediately because the component effectively has been disposed of. The amount is included in depreciation expense in profit or loss.

The actual overhaul costs of 100 are capitalised to the cost of the network and will be depreciated over the expected period until the next overhaul.
Q25. How are dismantling and removal costs accounted for?

The initial cost of an item of plant property and equipment includes the estimated cost of satisfying an obligation to dismantle and remove the item and restore the site on which it is located. In the construction of both wireless and fixed-line networks, telecoms often build on leased land and the terms of the lease require that the land or premises be reinstated upon expiry of the lease. In practice such obligations are referred to as asset retirement obligations (AROs). Therefore typically a telecom will recognise the full amount of the provision when the equipment initially is installed.

The obligation is accounted for in accordance with IAS 37 Provisions, Contingent Assets and Contingent Liabilities, by including the present value of the best estimate of the future cost of dismantling and removing the asset as part of the cost of the asset and recognising a provision for the obligation, i.e., the future cash flows are discounted. The adjustment to the cost of the asset may trigger impairment testing of the asset if there are indications that the additional cost is not recoverable (see Question 30).

The provision is remeasured at each reporting date based on the best estimate of the dismantling and asset removal costs. Changes to the estimate may result from changes in the amount or timing of the outflows or changes in discount rates. The effect of any changes to an existing provision that is included in the cost of the related asset, other than the unwinding of the discount, is added to or deducted from the cost of the related asset and depreciated prospectively over the asset’s remaining useful life.

**Identifying obligations and probability of an outflow**

Often there is a practical difficulty in identifying whether an obligation exists. In respect of leased land, the contract with the landowner may be unclear or silent on restoration requirements at the end of the contracted period.

If there is no obligation established by law or contract, then the telecom should consider if there is any “constructive” obligation arising from its published policies, past practices or public statements made about the dismantling and removal of its assets at the end of their useful lives. Under IFRSs a constructive obligation is a liability in the same way as a legal or contractual obligation.

In addition to the existence of an obligation, there should also be a probability of an outflow of resources to settle the obligation before a provision is recognised. In the context of IAS 37, probability means “more likely than not.”

In the telecoms there also is the question of whether such obligations actually are enforced in practice, i.e., is it probable that the obligation will result in any outflow of resources? In a number of developing countries, which is where most wireless network expansion currently is taking place, the legal and property systems are less sophisticated and rectification may not be enforced, i.e., an outflow of resources is not probable. Even in developed countries obligations may not always be enforced. For example, obligations in respect of removing cables laid in international waters on the seabed may not be enforced inconsistently. In practice some jurisdictions may consider that removing the original cables may cause more environmental damage than leaving them in place and therefore do not enforce the legal requirement to remove the cable.

Similar issues exist when telecoms previously have been given rights to locate telephone boxes in certain public places, but with the requirement to remove them when they are no longer in use. The increase in mobile penetration rates has made many of these sites redundant, but there are no immediate actions to decommission the telephone boxes and to remove them.

**Measurement of the provision**

Once it is determined that an obligation exists and it is probable that it will result in an outflow of resources, a provision is recognised and is measured at the best estimate of the future costs to dismantle and remove the assets. It should reflect the amount that the entity would be required to pay to settle the obligation at the reporting date. The provision should include estimated incremental direct costs such as amounts paid to consultants, costs of equipment dedicated to the dismantling and removal, and the costs of employees carrying out the work.

If the effect is material, then the estimate of future costs is discounted at a pre-tax rate that reflects the time value of money and the risks specific to the liability, unless the future cash flows are adjusted for these risks.
Risk is reflected by adjusting either the cash flows or the discount rate. In our experience, generally it is easier to adjust the cash flows for risk and to discount the expected cash flows at a risk-free interest rate. Adjusting the discount rate for risk often is complex and involves a high degree of judgement. In the event that a telecom chooses to reflect risk by adjusting the discount rate, in our view the discount rate used should not include an adjustment for an entity’s own credit risk. This is because IAS 37 notes that the discount rate reflects the risks specific to the liability. Therefore we believe that use of the entity’s average or incremental borrowing rate, which generally reflects the entity’s own credit risk, would not be an automatic proxy for the risk of a specific liability.

IAS 37 provides no guidance on whether the discount rate should include the effects of inflation. In our view, if the cash flows are expressed in current prices, then the effects of inflation should not be included in the discount rate (i.e., a real discount rate should be used). If the cash flows include inflation, then the discount rate should include the effects of inflation (i.e., a nominal discount rate should be used).

The measurement of the provision will take into account uncertainty in both the timing of cash outflows and the exact nature of the costs that will be incurred.

**Example 25.1**

Telecom T enters into agreements to lease land on which it will erect 100 mobile towers as part of a planned network expansion. Each lease is for ten years with an option to extend for an additional five years. The estimated useful life of the mobile towers currently is estimated at 15 years because T intends to renew the leases. The leases include a clause requiring reinstatement of the land to its present condition.

Management has assessed that an outflow of resources is probable. In determining the timing of reinstating the land, T uses a period of 15 years because it expects to renew the leases.

A surveyor has estimated that the present value of the costs of dismantling each mobile tower and restoring the land is on average 8,000. The mobile towers are ready for service at the end of 2009.

T records the following entry to recognise the provision:

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property, plant and equipment</td>
<td>800,000</td>
</tr>
<tr>
<td>Provision for site restoration (8,000 x 100)</td>
<td></td>
</tr>
<tr>
<td>To capitalise initial estimate of site restoration costs</td>
<td></td>
</tr>
</tbody>
</table>

**Changes in estimates**

Subsequent to initial recognition of a provision, generally the amount of the obligation will change due to the following:

- changes in the estimate of the amount or timing of expenditures required to dismantle the plant;
- changes in the discount rate; and
- the unwinding of the discount.
Example 25.2
Continuing Example 25.1, a discount rate of 10 percent was inherent in the calculation of the present value of the obligation. T records the following entry to recognise the unwinding of the discount at the end of the first year following installation:

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest expense *</td>
<td>80,000</td>
</tr>
<tr>
<td>Provision for site restoration (800,000 x 10%)</td>
<td></td>
</tr>
<tr>
<td>To unwind discount in year 1</td>
<td></td>
</tr>
</tbody>
</table>

* Not eligible for interest capitalisation (see Question 28).

In our experience, generally telecoms recognise property, plant and equipment using the cost model, i.e., assets are not revalued to fair value periodically. In that case, changes in the liability are added to or deducted from the cost of the related asset in the current period. However, the amount deducted from the cost of the asset cannot exceed its carrying amount; any excess is recognised immediately in profit or loss since an asset cannot have a negative carrying amount. An increase in the cost of an asset may require consideration of whether there is an indication of impairment (see Question 30).

Example 25.3
Continuing Example 25.1, at the end of the first year T re-estimates the present value of the obligation to be 7,500 per mobile tower, i.e., a total of 750,000. T records the following entry to re-estimate the amount of the provision, taking into account the unwinding of the discount illustrated in Example 25.2:

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision for site restoration (880,000 - 750,000)</td>
<td>130,000</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td></td>
</tr>
<tr>
<td>To recognise change in estimate of site restoration costs</td>
<td></td>
</tr>
</tbody>
</table>
Q26. How is depreciation calculated and recognised?

Subsequent to initial recognition, property, plant and equipment is depreciated on a systematic basis over its useful life. The method of depreciation reflects the pattern in which the benefits associated with the asset are consumed. IFRSs do not require a specific method of depreciation to be used and options include the straight-line method, the diminishing or reducing balance method and the sum-of-the-units method. However, in our experience the straight-line method is used most commonly by telecoms and we believe that it is the most appropriate method when the level of consumption of an asset over a period of time is uncertain.

Some telecoms follow a policy called the “Mass Asset” accounting policy whereby assets of a similar nature, often referred to as “equal life groups”, are grouped together and depreciated over the “average” useful life within the group. While there is no such concept under IFRSs, the standard does allow entities to group and depreciate components within the same asset class together, provided that they have the same useful life and depreciation method (see Question 24). As such, judgement will be required to develop an appropriate depreciation policy for homogenous assets.

**When to commence depreciation**

Depreciation of an item of property, plant and equipment begins when it is available or ready for use, i.e., when it is in the location and condition necessary for it to be capable of being operated in the manner intended by management.

Often when launching a new network or service, a telecom will undertake a “soft launch” in a particular geographical area or with a limited number of subscribers. A non-commercial trial with a limited number of subscribers is akin to pre-operating testing and does not necessarily indicate that the network is ready for use and therefore should be depreciated. However, the launch of a commercial service in a particular geographical area, regardless of an entity’s intentions to extend that area or indeed obligation to extend that area as a result of licence conditions, indicates that the network is ready for use and therefore that depreciation should commence.

Often, due to the long lead time in building and developing network infrastructure, telecoms have significant balances held as capital “work-in-progress” or “assets under construction”. Such assets are not subject to depreciation until the asset is available or ready for use. However, entities should ensure that the carrying amounts of such assets are reviewed for indications of impairment (see Question 30).

**Useful life**

The useful life of an asset is not necessarily limited to the length of an underlying customer contract, the period of the lease for the land on which assets are located, or the period of the licence under which the assets are operated. A telecom should consider its ability to redeploy the assets at the end of the contract and / or lease. In making this determination, the telecom should consider whether the contract allows redeployment, whether it is economic to do so, and whether it has a practice of recovering equipment for re-use.

**Example 26.1**

Telecom T enters into agreements to lease land on which it will erect 100 mobile towers as part of a planned network expansion. Each lease is for ten years with an option to extend for an additional five years. The estimated useful life of the mobile tower currently is estimated at 15 years because T intends to renew the leases. The licence under which the network will operate is for a period of 15 years, with tenders required at the end of the 15 years.

Once the network ceases to operate, T estimates that 90 percent of the network infrastructure will be obsolete in its current country of operation and will be uneconomic to redeploy, but the remaining 10 percent is expected to be redeployed without significant cost.

T depreciates the network infrastructure as follows:

- The 90 percent that would not be redeployed is depreciated over 15 years.
- The 10 percent that would be redeployed is depreciated over 20 years based on T’s best estimate of the subsequent use of the assets.
Borrowing costs

A revised version of IAS 23 *Borrowing Costs*, which requires the capitalisation of borrowing costs in respect of “qualifying assets,” is effective for qualifying assets for which the capitalisation of borrowing costs begins after 1 January 2009; earlier adoption from a date specified by the entity is permitted.

Under the transitional requirements of the revised standard, an entity capitalises borrowing costs relating to qualifying assets for which the commencement date for capitalisation is on or after the effective date. In our view, the unit of account in applying the transitional requirements is the qualifying asset rather than the borrowing costs.

Given the length of time it takes in the telecom industry to set up network infrastructure, the practical application of this standard is of particular interest to telecoms.
Q27. What is a qualifying asset?

Under IFRSs a **qualifying asset** is defined as an asset that *necessarily* takes a substantial period of time to be ready for intended use or for sale. These qualifying assets generally are those that are subject to major development or construction projects. Accordingly, inventories that are manufactured in large quantities on a repetitive basis in a short time are not qualifying assets even if the production process is delayed or there are inefficiencies in the development process.

There is no specific guidance on how long a “substantial period of time” is, but in our view it is a period in excess of six months.

**Example 27.1**

Telecom T owns a mobile tower that is part of its network infrastructure. The mobile tower is closed for a major refurbishment that will provide T with additional bandwidth. The refurbishment costs will be capitalised as part of property, plant and equipment (see Question 22).

Although there is no specific guidance under IFRSs as to whether an asset that is being refurbished can be a qualifying asset in accordance with IAS 23, in our view an asset that is being refurbished can be a qualifying asset if the refurbishment costs are eligible for capitalisation and the process takes a substantial period of time.

**Example 27.2**

Telecom T purchased a wireless spectrum licence recently issued by the local government authorities for 500 and has started work on the construction of the network infrastructure that it expects to complete in 18 months at a cost of 1,250. T has entered into a borrowing facility with Bank B for 1,500 to fund the construction of this qualifying asset. T considers the wireless spectrum licence to be an integral part of the entire network without which it cannot generate future economic benefits from its intended use for a period of 18 months. Therefore T concludes that attributable borrowing costs calculated in accordance with IAS 23 are eligible for capitalisation since this is consistent with its policy of not amortising the licence until the network infrastructure is ready for use (see Question 20).
Q28. What types of borrowing costs are eligible for capitalisation?

The borrowing costs that may be capitalised are those that otherwise would have been avoided. This includes interest on borrowings made specifically for the purpose of obtaining the qualifying asset (i.e., specific borrowings) or the cost of other borrowings that could be repaid if the expenditure on the asset had not been incurred (i.e., general borrowings).

Examples of borrowing costs eligible for capitalisation include:

- interest expense calculated using the effective interest method;
- finance charges in respect of finance leases; and
- foreign exchange differences to the extent that they are regarded as an adjustment to interest costs.

**Example 28.1**

Telecom T in the UK has an existing euro-denominated liability (euro bond) of 100 million for a period of five years at 6 percent per annum in respect of a qualifying asset; interest payments of euro 1.5 million are payable on a quarterly basis. The interest payments qualify for capitalisation as borrowing costs under IAS 23. Lately, with the volatility in exchange rates between Sterling (T’s functional currency) and the euro, T’s management decided to hedge, as an economic or accounting hedge, against the currency exposure created by the euro borrowing.

To hedge this exposure, on 1 January 2009 T entered into a currency swap under which T will, on a quarterly basis, receive euro-denominated interest at 6 percent calculated on a notional amount of euro 100 million and pay GBP-denominated interest at 4.5 percent on a notional amount of GBP 96 million. The GBP:euro spot FX rate on 1 January 2009 was 0.96:1.

At 31 March 2009, the GBP:euro spot FX rate was 0.93:1. The interest paid on the bond for quarter ended 31 March 2009 was GBP 1,395,000 (euro 1,500,000 converted into GBP at spot FX rate of 0.93:1). Also, on 31 March 2009 T received a net payment of GBP 315,000 under the currency swap (i.e., GBP 1,395,000 on the euro-receive leg and GBP 1,080,000 on the GBP-pay leg). The fair value of the currency swap at 31 March 2009, after settlement of the quarterly interest amounts, was a liability of GBP 3,000,000.

T determines that the borrowing cost eligible for capitalisation for the quarter ended 31 March 2009 is GBP 1,080,000, which is the net amount arrived at based on the interest paid on the euro bond and the interest received on the currency swap. Changes in the fair value of the currency swap other than interest accrual should not be included in the borrowing costs to be capitalised because they represent changes in the present value of expected future cash flows under the swap rather than the borrowing costs incurred.
Q29. How is the amount of borrowing costs eligible for capitalisation calculated, and what is the period of capitalisation?

A telecom may borrow specifically for the construction or development of a qualifying asset, in which case the entire amount of borrowing cost, net of any income earned on the temporary investment of those funds, is capitalised. With respect to general borrowings, the weighted average interest cost, excluding the interest cost on specific borrowing relating to other qualifying assets, is applied to expenditure on the qualifying asset.

There is no specific guidance as to whether an entity should include specific borrowings incurred for the purpose of obtaining non-qualifying assets, such as a finance lease entered into to purchase a motor vehicle or money borrowed for investing in a controlled business or an associate, in calculating the capitalisation rate. In our view, judgement is required in determining the borrowings that can be considered as general borrowings in order to be included in capitalisable borrowing costs for the calculation of the weighted average capitalisation rate.

Example 29.1

On 1 January 2009 telecom T started work on constructing the network infrastructure with respect to its recently purchased 3G licence. T expects the entire project to cost 5,000,000. The network infrastructure is considered to be a qualifying asset in accordance with IAS 23. Expenditure incurred as of 31 December 2009 relating to the construction is as follows:

- On 30 June 2009, an amount of 1,000,000.
- At the end of each month end from July to December, an amount of 250,000.

T is funding the construction from two sources:

- A borrowing facility of 1,000,000 related specifically to the construction and used to fund the expenditure incurred in June 2009. The loan is repayable in four years and has a fixed annual interest rate of 7.5 percent.
- General borrowings for the business that are not linked specifically to the construction, comprising mainly:
  - debentures with a face value of 3,000,000 and an interest rate of 8 percent; and
  - a shareholder loan of 500,000 with an interest rate of 6 percent.

**Interest to be capitalised on specific borrowings**

End June: 1,000,000 x 6 months x 7.5% = 37,500.

**Calculation of capitalisation rate on general borrowings**

Interest on debentures in 2009: 3,000,000 x 8% = 240,000.
Interest on shareholder loan in 2009: 500,000 x 6% = 30,000.

Capitalisation rate: \[
\frac{\text{total borrowing costs for the period}}{\text{total borrowings during the period}} = \frac{270,000}{3,500,000} = 7.71\% \]

**Interest to be capitalised on general borrowings**

End July: 250,000 x 5 months x 7.71% = 8,031
End August: 250,000 x 4 months x 7.71% = 6,425
End September: 250,000 x 3 months x 7.71% = 4,819
End October: 250,000 x 2 months x 7.71% = 3,213
End November: 250,000 x 1 month x 7.71% = 1,606
Total = 24,094

**Total interest to be capitalised**

37,500 + 24,094 = 61,594.
Borrowing costs

A telecom commences capitalisation when (1) expenditure for developing or constructing the asset are being incurred; (2) borrowing costs are being incurred; and (3) activities to put the asset into intended use or sale are being performed. In the telecoms sector, in which there are strict regulations and requirements to obtain the necessary regulatory licences, there is likely to be technical and administrative work prior to active construction. Borrowing costs are capitalised once the technical or administrative activities begin.

Capitalisation should be suspended during extended periods of interruption such as when the telecom is waiting for the various parts of a mobile tower and has to suspend construction while waiting. Capitalisation should cease when the activities necessary to get the asset ready for intended use are substantially complete.
Impairment of non-financial assets

The recent significant technology innovations and enhancements in telecom networks from second generation to third generation and to Wimax, the significant investment needed to deliver the next generation of broadband services, and the bundling of services such as television, broadband and telephone, have made detailed impairment testing an established procedure for most telecoms.

In the telecoms sector, impairment testing relies heavily on discounted cash flow projections. Due to the highly sensitive nature of such projections and the underlying assumptions, typically they represent one of the most important judgements that management can make when preparing the financial statements.
Q30. When are non-financial assets tested for impairment?

IAS 36 *Impairment of Assets* covers the impairment of a variety of non-financial assets, including property, plant and equipment, intangible assets and goodwill. Impairment testing is required when there is an indicator of impairment. However, annual impairment testing is required for goodwill, and intangible assets that either are not yet available for use or have an indefinite useful life; this impairment test may be performed at any time during the year provided that it is performed at the same time each year.

**Example indicators of impairment**

- **Market value has declined significantly, or the entity has operating or cash losses.** The migration of customers from fixed-line to wireless services may result in operating cash losses in the fixed-line business and result in a trigger for impairment.
- **Technological obsolescence.** The technology shift from copper-based to fibre-based network may be an indicator of impairment for the copper-based network.
- **Competition.** The saturation of the mobile market intensifies competition for customers, which may reduce revenues and operating profits, thereby indicating potential impairment.
- **The carrying amount of the telecom’s net assets exceeds its market capitalisation.**
- **Significant regulatory changes.** For example, the regulation of roaming charges in the European Union.
- **Physical damage to the asset.**
- **Significant adverse effect on the telecom that will change the way the asset is used or expected to be used.** The impact of sharing networks with other telecoms or exchanging network capacity.

**Example 30.1**

Telecom T, a wireless service provider, operates a mobile wireless network. Customer volumes have dropped 35 percent in the last year, reducing the rate of return on network capacity to well below what was budgeted. Although management expects the downturn in customer traffic to recover over the following two years, management concludes that there is an indicator of impairment in respect of the network infrastructure and related non-financial assets.
Q31. How is recoverable amount determined?

Whenever possible an asset is tested for impairment on its own; otherwise assets are grouped into cash-generating units (CGUs) and tested (see Question 32). Goodwill is allocated to CGUs and tested for impairment either as part of the testing of individual CGUs if there is an indicator of impairment, or as a separate test when there is no indicator of impairment. An impairment loss is the excess of an asset’s (CGU’s) carrying amount over its recoverable amount. Recoverable amount is the higher of value in use and fair value less costs to sell.

It may sometimes be easier to determine fair value less cost to sell than value in use. If the fair value less cost to sell exceeds the carrying amount of an asset or a CGU, then it is not necessary to calculate the value in use. If the fair value less cost to sell can be estimated for an individual asset and is higher than the asset’s carrying amount, or fair value less cost to sell can be shown to be close to the asset’s value in use (i.e., for an asset that is held for disposal), then it is not necessary to test the asset on a CGU basis.

**Value in use**

Value in use is defined as the present value of the future cash flows expected to be derived from an asset or CGU, both from continuing use and ultimate disposal. The calculation of value in use should consider:

- the estimated future cash flows that the telecom expects the asset to earn;
- possible variations in the amount or timing of those future cash flows;
- the time value of money, which is reflected by using a discount rate that reflects the current market risk-free rate of interest;
- the price for the uncertainty inherent in the asset; and
- other factors, such as illiquidity, that would be reflected in valuing the expected future cash flows from the asset.

Some of the above factors are discussed below in greater detail.

**Forecast period**

The value in use calculation should be based on reasonable and supportable assumptions concerning projections of cash flows approved by management (as part of the budget) and adjusted to the requirements of IAS 36. These cash flow forecasts should cover a maximum of five years unless a longer period can be justified. The cash flows after the forecast period are extrapolated into the future over the useful life of the asset or CGU using a steady or declining growth rate that is consistent with that of the product, industry or country, unless there is clear evidence to suggest another basis; these cash flows form the basis of what is referred to as the terminal value.

For growth businesses, much of the value will often be in the period beyond five years. In this case the overall valuation may be very sensitive to the long-term growth rates selected and the base cash flows at the end of the budgeted period. In our view, the final year of management projections should be used to extrapolate cash flows into the future only if the final year represents a steady state in the development of the business. If a steady state has not been reached, then we believe that adjustments are necessary to reflect the expected development of the business. Using an average of the projections over the forecast period would be misleading if the estimated cash flows are increasing or decreasing over the forecast period.

For a CGU that is in the start-up phase, cash flow projections should reflect realistic assumptions regarding revenue growth.

**Capital expenditure**

Cash flows in respect of existing assets should reflect the asset in its present condition. Therefore they should exclude future capital expenditure that will improve or enhance the asset’s performance or a restructuring to which the telecom is not yet committed. These costs should be taken into consideration only once the costs are incurred. However, capital expenditure necessary to maintain the performance of the asset and maintenance expenditure should be taken into account when estimating future cash flows.

For an asset that is currently being constructed and requires future expenditure to prepare it for use, these expected cash outflows are incorporated into the estimated cash flows when performing impairment testing.
Impairment of non-financial assets

Discount rate
The discount rate used in determining value in use, which reflects current market assessments of the time value of money and the risks specific to the asset or CGU, is based on the return that investors would require if they were to choose an investment that would generate cash flows of amounts, timing and risk profile equivalent to those of the asset or CGU. Therefore while the cash flows in the value in use calculation are entity-specific, the discount rate is not.

In our experience, it is rare that a discount rate can be observed directly from the market. Therefore generally it will be necessary to build up a market participant discount rate that appropriately reflects the risks associated with the cash flows of the CGU being valued. In the absence of a discount rate that can be observed directly from the market, IAS 36 refers to other starting points in determining an appropriate discount rate: the entity's weighted average cost of capital (WACC), the entity's incremental borrowing rate, and other market borrowing rates. In practice the most common approach is to estimate an appropriate rate using the WACC formula. Because it is a CGU-related rate that is required, the WACC of the entity may need to be adjusted to a market participant discount rate for the CGU.

The WACC is based on the fair value rather than the carrying amount of debt and equity; therefore an entity's actual debt / equity ratio is not used in the calculation. In calculating the cost of equity as an input to the calculation of WACC, it is common to use the capital asset pricing model (CAPM), which estimates the cost of equity by adding risk premiums to the risk-free rate. The gearing (i.e., the proportion of asset or CGU financing that is funded by debt) and the cost of debt used in the WACC for the purpose of determining value in use are not entity-specific. IAS 36 notes that the discount rate should be independent of the entity’s capital structure and the way in which the entity financed the acquisition of the asset (or CGU). Therefore the gearing and cost of debt are those that the market participant would expect in relation to the asset or CGU being tested for impairment.

The cost of debt should be based on long-term rates being incurred at the date of valuation for new borrowings, rather than the rates negotiated historically in the debt market for existing borrowings. The determination of appropriate rates includes consideration of the entity’s incremental borrowing rate. A key assumption underpinning WACC is a constant level of gearing throughout the cash flow period, including in the terminal value. If this assumption does not apply, then it will be necessary to calculate WACC separately each year using different gearing levels as applicable, or to use alternative methods.

Fair value less costs to sell
A binding sale agreement in an arm’s length transaction will give the best evidence of fair value. If there is no binding sale agreement but there is an active market for the asset, then the current market bid price provides the best evidence of fair value.

If there is no binding sale agreement and no active market, then the fair value should be determined based on the best information available to reflect the amount that an entity could obtain at the reporting date from the disposal of the asset in an arm’s length transaction between knowledgeable, willing parties. The fair value also reflects the market assessment of expected net benefits to be derived from restructuring the unit or from future capital expenditure. Recent transactions for similar assets in the same industry are considered in determining fair value. Valuation techniques can be used to determine the amount.
Q32. How are cash-generating units identified?

It may not be possible to assess a single asset for impairment because the asset generates cash flows only in combination with other assets. Therefore assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups thereof (e.g., a plant or division). Such a group is known as a cash-generating unit (CGU). A CGU should be identified consistently from period to period for the same asset or types of assets, unless a change is justified.

Example 32.1

Telecom T acquired a spectrum licence for wireless services issued by the local government. In order to operate the licence, T set up the underlying network infrastructure. Over the last year competition in the market has increased and management concluded that there was an indication of impairment (see Question 30). Accordingly, T is calculating the recoverable amount of the spectrum licence.

However, since the spectrum licence generates cash inflows for T only together with the underlying network, the relevant CGU for impairment testing purposes is the entire network infrastructure of T.

The identification of CGUs requires judgement and is one of the most difficult areas of impairment accounting. In identifying whether cash inflows from assets or CGUs are largely independent of the cash inflows from other assets or CGUs, various factors, including the manner in which management monitors operations and makes decisions about continuing or disposing of assets and/or operations, should be considered. However, the identification of independent cash inflows is the key consideration.

For telecoms, identifying CGUs is further complicated in the current environment of network convergence and stiff competition, as a result of which telecoms are increasingly providing bundled products and services. Further, many telecoms operate on the basis of the types of customers, i.e., residential or commercial, as opposed to the types of network, e.g., fixed-line and wireless. This interdependency of the revenue streams has the effect of increasing the size of the CGU because assets at a lower level do not generate largely independent cash inflows. In our view, if more than half of the cash inflows of an operation are generated independently from other operations, then the operations are likely to be separate CGUs.

Example 32.2

Telecom T is a small subsidiary of a large telecom, catering for the residential customers in a particular region. It offers a “value-pack” to its customers, which is a bundle of three products and services: fixed-line, broadband and television. Although customers can elect to purchase elements of the package, 75 percent of customers choose the value-pack. Accordingly, T concludes that its business as a whole comprises a single CGU.

Because a telecom’s network often is common across many of its product lines or businesses, the network may need to be viewed on a geographic country or regional basis. Monitoring and management of the business may be on a product basis (i.e., discrete billing systems for discrete ranges of products), but the products typically will use the same underlying network. While use of the network is monitored, independent cash inflows may not be identifiable for individual parts of the physical network.

Goodwill

Goodwill by itself does not generate cash inflows independently of other assets or groups of assets and therefore is not tested for impairment separately. Instead, it should be allocated to the acquirer’s CGUs that are expected to benefit from the synergies of the business combination from which goodwill arose, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.
Example 32.3
Company M is a manufacturer of specialised telecommunications equipment. It acquires one of its main competitors, company N, which operates in another geographical area. As part of its acquisition strategy, M gradually will shift N’s customers onto M’s portfolio of products and services. M does not plan to support N’s brand or product lines. In the absence of any factors to the contrary, in our view M should allocate the majority of goodwill acquired to its existing CGUs that are expected to benefit from the acquisition of N’s customers and the related synergies.

The allocation of goodwill is done from the acquisition date. It may not be possible to finalise the allocation by the end of the first annual period in which the business combination took place. In such cases the initial allocation of goodwill to CGUs must be completed before the end of the first annual reporting period beginning after the acquisition date.

Each unit or group of units to which goodwill is allocated should:

- represent the lowest level within the entity for which information about goodwill is available and monitored for internal management purposes; and
- not be larger than an operating segment determined in accordance with IFRS 8 Operating Segments.

Corporate assets
Similar to goodwill, corporate assets do not generate cash inflows independent of other assets or group of assets; rather, they contribute to the future cash flows of more than one CGU. Corporate assets may include head offices, computers and research centres. If an indicator of impairment of corporate assets exists, then their carrying amount is allocated to CGUs based on a “reasonable and consistent” basis.

If such allocation cannot be made based on a reasonable and consistent basis, then the impairment is carried out in two stages:

- The first test is performed at the individual CGU level without any allocation of the corporate asset(s), called the “bottom-up” test.
- Thereafter the second test is applied to the minimum collection of CGU to which the corporate assets can be allocated on a reasonable and consistent basis, called the “top-down” test.
Q33. Can impairment losses be reversed?

Telecoms should assess at each reporting date whether there is any indication that a previously recorded impairment loss, with the exception of an impairment of goodwill, has reversed partly or in full. If any such indication exists, then the telecom estimates the recoverable amount of that asset or cash-generating unit (CGU).

Any reversal is restricted to the lower of (1) the asset’s (CGU’s) recoverable amount; and (2) the amount necessary to restore the assets to their pre-impairment carrying amounts less subsequent depreciation / amortisation that would have been recognised.

**Example 33.1**

Telecom T operates a mobile wireless network. Customer volumes were down 20 percent last year, which resulted in T writing down the carrying amount of its mobile tower from 60 million to 25 million. T depreciates the mobile tower on a straight-line basis over 15 years, or 7 million per annum.

Customer volumes have recovered to some extent in the current year, which triggers T to re-estimate the recoverable amount of the mobile tower. A private equity firm has made an offer to purchase T’s mobile tower for 50 million, and the estimated value in use is 55 million.

Accordingly, T increases the carrying amount of the mobile tower to 55 million, but limited to the carrying amount of the mobile tower if no impairment had been recognised, i.e., 53 million (60 - 7). Therefore T recognises a reversal of an impairment loss of 28 million (53 - 25).
Service concession arrangements

A majority of the communications markets in which telecoms operate are subject to regulation, and in most cases certain conditions, licences or other authorisations have to be obtained in order to operate. Telecoms may enter into “service arrangements” with regulatory authorities to provide communication services to all sections of the population within a particular area throughout a licence period. The service guarantees public access to a minimum offering of telecommunications services, including a real-time connection that allows national and international telephone calls, transmission and reception of faxes, and access to the Internet. Typically the regulatory authority sets price ceilings on these service licences.

Telecoms are identified in IFRIC 12 Service Concession Arrangements as an example of public sector infrastructure services that are expected to be within the scope of the interpretation. The main impact of IFRIC 12 is that a telecom does not recognise the infrastructure as its property, plant and equipment if the infrastructure is existing infrastructure of the grantor or is infrastructure constructed or purchased by the telecom as part of the service concession arrangement. Furthermore, the telecom recognises consideration receivable from the grantor for construction services, including upgrades of existing infrastructure, as a financial asset and / or an intangible asset.
Q34. Which arrangements are within the scope of IFRIC 12?

IFRIC 12 applies to public-to-private service concession arrangements in which the public sector entity (the grantor) controls or regulates the services provided by a private sector entity (the telecom) with the infrastructure and their prices, and controls any significant residual interest in the infrastructure. IFRIC 12 does not address all forms of infrastructure service arrangements, and does not address the accounting by grantors. Any service concession arrangements within the scope of IFRIC 12 are excluded from the scope of IFRIC 4 Determining whether an Arrangement contains a Lease.

While IFRIC 12 does not define “public-to-private service concession arrangements”, it does describe the typical features of such arrangements. Typically a public-to-private service concession arrangement within the scope of IFRIC 12 will involve most of the following:

- **Infrastructure used to deliver public services.** The infrastructure can take many forms (e.g., a wireless or fixed-line data network), or be specialised plant or equipment (e.g., mobile tower).
- **A contractual arrangement between the grantor and the telecom.** This arrangement is referred to as a “concession agreement”. The concession agreement specifies the services that the telecom is to provide to the grantor and governs the basis upon which the telecom will be remunerated. Arrangements of this nature can vary greatly in duration, but terms of 30 years or more are not unusual.
- **Supply of services by the telecom.** These services may include the construction / upgrade of the infrastructure and the operation and maintenance of that infrastructure. Service concessions involving a significant construction or upgrade element are sometimes called “build-operate-transfer” or “rehabilitate-operate-transfer” arrangements. Often the construction / upgrade services are provided during the early years of the concession, but they also may be provided in stages during the concession period.
- **Payment to the telecom over the term of the arrangement.** In many cases the telecom will receive no payment during the initial construction / upgrade phase. Instead, the telecom will be paid by the grantor directly or will charge users during the period that the infrastructure is available for use.
- **Return of the infrastructure to the grantor at the end of the arrangement.** For example, if the telecom has legal title to the infrastructure during the term of the arrangement, then legal title may be transferred to the grantor at the end of the arrangement, often for no additional consideration.

The above features give a broad indication of the types of arrangements to which the interpretation may relate. A wide variety of service concession arrangements exist in practice and not all of the arrangements that are within the scope of IFRIC 12 will have all of the features listed above.

The scope of IFRIC 12 is defined by reference to control of the infrastructure. An arrangement is within the scope of the interpretation if:

- the grantor controls or regulates what services the telecom must provide with the infrastructure, to whom it must provide them, and at what price; and
- the grantor controls – through ownership, beneficial entitlement or otherwise – any significant residual interest in the infrastructure at the end of the term of the arrangement.

**Control of pricing**

The grantor may control or regulate the pricing of the services to be provided using the infrastructure in a variety of ways. In our view, generally the criterion in IFRIC 12 is satisfied when the service concession involves explicit and substantive control or regulation of prices. This would include price-setting by an independent economic regulator.

In some cases prices may be re-set periodically by the grantor, or the grantor may give the telecom discretion to set unit prices but set a maximum level of revenue or profits that the telecom may retain. All of these forms of arrangement are consistent with the control criterion in IFRIC 12. In some cases prices may be indexed by, or re-set periodically by reference to, a factor that is outside the control of the grantor. For example, prices may be indexed annually by a consumer price index (CPI), or a regulator may establish a price formula that depends on the value of an index, e.g., the regulator may specify that prices may rise by a maximum of CPI - X, where X is a value that is re-set periodically by the regulator. Although the grantor...
cannot control the value of CPI, the grantor is controlling the framework in which the price is set. We expect that such price-setting mechanisms constitute price regulation that is consistent with the scope criterion in IFRIC 12.

An arrangement may be within the scope of IFRIC 12 when either the services to be provided or pricing is controlled by a regulator acting in the public interest. For example, when the telecom is a monopoly telecoms supplier in a geographic area, an “independent regulator” may be established to set prices and to monitor the telecoms compliance with the conditions of its licence. The duties and powers of the regulator may be set out in legislation that requires the regulator to act in the public interest and also constrains the ability of the government to direct the operations of the regulator.

Control and valuation of the residual
The simplest way in which the grantor may control the residual is for the concession agreement to require the telecom to return concession assets (e.g., a telecoms network) to the grantor, or to transfer the infrastructure to a new telecom, at the end of the arrangement for no consideration. However, other forms of arrangement also are within the scope criteria of IFRIC 12.

The residual interest criterion may be met when the grantor holds an option to acquire the infrastructure assets at the end of the concession. Such an option gives the grantor the ability to control the use of the asset at the end of the concession period and restricts the telecoms practical ability to sell or pledge any significant interest in the infrastructure. For example, a telecom may acquire a network site and develop it or enhance its capabilities to be able to offer additional services. At the end of the arrangement the grantor may have an option to acquire the network and related assets for its then fair value. This is an example of an arrangement that is within the scope of IFRIC 12, in which the grantor controls the residual interest in the infrastructure but the telecom bears residual value risk.

Example 34.1
A grantor awards a concession to telecom T to build and operate a new mobile network. The grantor transfers to T the land on which the network infrastructure is to be constructed. Construction is expected to take five years, after which T will operate the network for 15 years. During these 15 years, T has a contractual obligation to perform maintenance on the network, including the replacement of components of the infrastructure as required. At the end of the arrangement the network will revert to the grantor. T will charge customers for use of the network based on a tariff schedule set by the government.

This arrangement is a public-to-private arrangement as the network is constructed pursuant to general communications policy and is to be used by the public. The arrangement is within the scope of IFRIC 12 as:

- the grantor controls the services to be provided using the infrastructure and the price charged for those services, i.e., the grantor requires the infrastructure to be used as a wireless network available to the public and sets the tariffs; and
- the grantor controls the significant residual interest in the infrastructure, as the network reverts to the grantor at the end of the arrangement.
Q35. How is the consideration measured and recognised under IFRIC 12?

A telecom recognises consideration received or receivable for providing construction / upgrade services as:

- a financial asset to the extent that it has an unconditional right to receive cash irrespective of usage of the network infrastructure; and / or
- an intangible asset to the extent that its consideration is dependent on usage of the network infrastructure.

Therefore the nature of the asset recognised by the telecom will depend on the allocation of the demand risk between the telecom and the grantor. In simple cases the telecom recognises a financial asset to the extent that the grantor bears the demand risk and an intangible asset to the extent that the telecom bears the demand risk.

Example 35.1
Continuing Example 34.1, telecom T will recognise an intangible asset because it will charge customers for use of the network based on a tariff schedule set by the government. T’s revenue is not guaranteed by the government.

The telecom recognises and measures revenue in accordance with IAS 11 Construction Contracts and IAS 18 Revenue for the services it performs. If the telecom performs more than one service under a single contract (i.e., multiple element arrangements – see Question 3), consideration received or receivable is allocated by reference to the relative fair values of the services delivered, when the amounts are separately identifiable. The telecom accounts for revenue and costs relating to construction or upgrade services in accordance with IAS 11 and those relating to operation services in accordance with IAS 18.

The telecom may have contractual obligations that it must fulfill as a condition of its licence to: (1) maintain the network infrastructure to a specified level of serviceability; or (2) restore the network infrastructure. These contractual obligations are recognised and measured in accordance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets; i.e., at the best estimate of the expenditure that would be required to settle the present obligation at the end of the reporting period.

Borrowing costs attributable to the arrangement are recognised as an expense in the period in which they are incurred. If the telecom recognises an intangible asset, then the borrowing costs are capitalised during the construction phase of the arrangement assuming that the definition of a “qualifying asset” is met (see Questions 28 and 29).
Outsourcing arrangements

In today’s era of commoditisation of basic telephony service, convergence and competition, many telecoms are seeking new opportunities for both revenue and margin growth. Outsourcing in its variety of different forms is seen by many telecoms as a way of achieving one or both of these objectives.

A telecom may be the entity that has outsourced the performance of certain activities to another party or, as discussed here, may be providing outsourced services itself. The latter scenario has become more common as many fixed-line telecoms have sought new products and services to provide revenue growth.

For example, a telecom may enter into a contract to design and upgrade a new internal voice and data network. The telecom also undertakes to run the network after implementation including fault management, handsets and change requests. As part of the outsourcing contract, all of the existing internal network infrastructure as well as personnel will be transferred to the telecom.

Such contracts raise many accounting questions, not just in terms of revenue recognition but also cost recognition, asset ownership and leasing. Some of these issues are discussed in this section. In order to determine the proper accounting treatment for outsourcing contracts, the telecom should consider the facts and circumstances of each contract.
Q36. What factors are relevant in assessing the accounting for outsourcing arrangements?

Entities should consider the following issues when entering into outsourcing arrangements:

- Often outsourcing contracts include the transfer of assets (e.g., an IT platform or network equipment) and therefore IFRIC 4 *Determining whether an Arrangement contains a Lease* should be considered (see Question 11). If it is determined that the outsourcing contract contains leased assets, then the asset should be accounted for in accordance with IAS 17 *Leases* (see Question 13). Equally relevant is considering whether the asset is property, plant and equipment under IAS 16 *Property, Plant and Equipment*.

- When an outsourcing contract includes a public-to-private infrastructure service concession involving a public service obligation, the contract might be classified as a service concession agreement under IFRIC 12 *Service Concession Arrangements* (see Question 34).

- A contract may include multiple elements, and the identification and recognition of those separate elements may be required in determining appropriate revenue recognition (see Question 3).

- Certain outsourcing contracts include the transfer of the integrated set of activities and assets, including employees. In these situations entities should consider whether the outsourcing contract is a business combination within the scope of IFRS 3 *Business Combinations*. When the contract is indeed a business combination, the contract should be accounted for in accordance with IFRS 3.

In order to determine the proper accounting treatment for outsourcing contracts, telecoms should consider the facts and circumstances of each contract.

In our view, in order to determine the amount of revenue earned it will be necessary for the outsource telecom to assess the most appropriate measure of performance, although in some cases this could be complex because of the mix of services provided. In some cases an output-based measure of performance will be appropriate, for example the number of maintenance hours provided in a month or number of transactions processed. In other cases when services are performed through an indefinite number of acts over a specific period, it may be appropriate to recognise outsourcing contract revenue on a straight-line basis over that period.

Many contracts will require the outsource telecom to construct a specific asset as part of the service. It should be assessed whether the construction of the asset represents a separate component of the arrangement that should be accounted for separately. The construction of the specific asset, when separable, generally is accounted for in accordance with IAS 11 *Construction Contracts*. 
Joint arrangements

Historically telecoms avoided sharing the costs of network infrastructure as network coverage and quality was seen as a differentiator and a competitive advantage. It also effectively acted as a barrier to entry given the prohibitive costs of network roll out. Regulators may also have viewed joint network infrastructure builds as anti-competitive behaviour.

Increasingly, coverage and quality are no longer seen as providing a competitive advantage in most developed markets. The past level of investment in networks and licences, together with an intense level of competition, means that cost reduction and efficiencies have become more crucial drivers of performance. The sharing of radio access networks is increasingly viewed as a viable option, not only by telecoms but crucially also by regulators. The environmental benefits on both the built environment and energy usage are also being viewed positively by some regulators and governments.

There are many collaborative arrangements in the marketplace, which range from the relatively straightforward rental of mobile tower space to more complex joint build arrangements and full-blown joint venture network infrastructure companies.

The IASB is working on a short-term convergence project with the FASB, partly to reduce some differences between IAS 31 Interests in Joint Ventures and U.S. GAAP, and a final standard is expected in the first quarter of 2010. See Appendix I Future developments.
Q37. How are joint ventures accounted for?

The definition of a joint venture has two aspects, both of which should be present in order to conclude that an entity is a joint venture rather than an associate or subsidiary:

- a contractual arrangement whereby two or more parties undertake an economic activity...
- ...that is subject to joint control.

The existence of a contractual arrangement is a key aspect of the definition of a joint venture. An entity that has its shares split evenly among its shareholders, for example with two shareholders each having a 50 percent interest, or with four shareholders each having a 25 percent interest, is not a joint venture unless there is a contractual arrangement that establishes joint control.

The contractual arrangement between the venturers can take many forms. It could be a contract signed by the venturers, minutes of discussions between the venturers, or the joint venture arrangement could be incorporated into the articles or by-laws of a jointly controlled entity. The form of the contractual arrangement may also depend on the requirements of the local laws and regulations. However, in the event that the agreement is not in writing, nonetheless it should be subject to a valid means of evidencing a contract in the relevant jurisdiction(s). Accounting for joint ventures differs depending on whether the venture is considered a jointly controlled asset, jointly controlled operation or jointly controlled entity.

**Jointly controlled assets and jointly controlled operations**

“Jointly controlled assets” arise from an arrangement that is a joint venture carried on with assets that are controlled jointly, whether or not owned jointly, but not through a separate entity. The investor includes in its financial statements whether consolidated or not, its share of the jointly controlled assets, the liabilities and expenses that it incurs and any income from the sale or use of its share of the output of the joint venture. In addition, it should recognise any owned assets or liabilities that it controls alone.

**Example 37.1**

Telecoms T1 and T2 form a 50:50 joint venture to build a new submarine cable system in the Pacific Ocean. As part of the joint venture, T1 and T2 each will contribute 100,000. T1 and T2 will share the cost of obtaining the “right of way” agreement and other fees of the jurisdiction through which the cable runs. T1 and T2 have proportionate ownership of the underwater cable system, and the day-to-day operating costs will be shared equally.

The total development costs that qualify for capitalisation under IFRSs are 200,000; costs of 80,000 are incurred as operating costs. Assuming that T1 and T2 each incurred 50 percent of the related costs, then each telecom should recognise property, plant and equipment of 100,000 in its statement of financial position, and expenses of 40,000 in profit or loss. In future periods T1 and T2 should depreciate the cable system over its estimated useful life and account for their share of costs.

A “jointly controlled operation” is a joint venture carried on by each venturer using its own assets in pursuit of the joint operation.

For jointly controlled operations the venturer includes in its financial statements, whether consolidated or not, the assets that it controls and the liabilities and expenses that it incurs in the course of pursuing the joint operation, plus its share of the income from the joint operation.

In recognising the venturer’s share of the income and expenses of a jointly controlled operation, IAS 31 differs from the proportionate consolidation method used for jointly controlled entities (see below). The standard requires a venturer to account for the expenses that it incurs and its share of the income that it earns from the sale of goods or services by the joint venture (jointly controlled operations).
Example 37.2
Telecoms T1 and T2 enter into a 50:50 joint venture arrangement to develop and market billing software for a new version of the smart-phone. T1 is responsible for bringing in the personnel and the necessary assets such as computers as its share of the contribution. T2 owns the licences that give it the exclusive right to provide applications on the smart-phone. The billings software will provide the subscriber with the various usage charges in one consolidated monthly wireless bill.

As part of the arrangement, T1 acts as the central billing party on behalf of the joint venture. During the period T1, on behalf of the jointly controlled operation, enters into sales contracts with wireless service providers and earns revenue of 100, and also incurs operating expenses of 40; T2 incurs operating expenses of 30 in relation to the jointly controlled operation’s activities. Therefore the profit generated by the jointly controlled operation is 30 (100 - 70).

In order to share this income equally between T1 and T2 (15 for each venturer), T1 recognises a reduction in revenue and a payable to T2 of 45 (100 - 40 - 15), and T2 recognises an increase in revenue and a receivable from T1 of 45 (30 + 15).

Jointly controlled entities
When a joint venture activity is carried on through a separate entity, e.g., a corporation or partnership, it is known as a “jointly controlled entity.” In our experience, this is the most common form of joint venture in the telecoms sector.

Example 37.3
Telecoms T1, T2 and T3 form a consortium to acquire a spectrum licences being auctioned by the government. The three telecoms form a separate company, X, and each contribute cash to fund the acquisition of the licences and to set up the mobile towers and related network infrastructure. T3 also agrees to contribute the billing software as part of its contribution. All three telecoms enter into a joint venture arrangement with equal share of ownership in X. In this example, X is a jointly controlled entity.

Either the equity method or proportionate consolidation is used to account for jointly controlled entities. In our experience, usually telecoms apply the proportionate consolidation method as it results in higher revenues being reported.

Equity method
Under the equity method:

- the investment is stated as one line item at cost plus the investor’s share of retained post-acquisition profits and other changes in net assets;
- cost includes the goodwill arising on acquisition;
- the investor’s share of the after-tax profit or loss of the associate, adjusted for fair value adjustments recognised upon initial recognition, is presented as a single line item in the statement of comprehensive income;
- the investor’s share of other comprehensive income of the associate, e.g., foreign currency translation differences and changes in a cash flow hedging reserve, is presented as a single line item in the statement of comprehensive income, separate from the investor’s share of the associate’s after-tax profit or loss; and
- any distributions received from the associate reduce the carrying amount in the statement of financial position.

Proportionate consolidation
Generally the key difference between full consolidation and proportionate consolidation is that under proportionate consolidation only the investor’s share of the assets and liabilities is accounted for and therefore no non-controlling interest is recognised. In performing proportionate consolidation, the usual consolidation procedures apply. For example, inter-entity eliminations are made to the extent of the investor’s interest.
Appendix I

Future developments
The following is a brief summary of the projects of the IASB that correspond to the topics addressed in this publication. This information is current as of 15 November 2009.

Revenue
The IASB and the FASB published a joint discussion paper (DP) Preliminary Views on Revenue Recognition in Contracts with Customers in December 2008. As a result of subsequent redeliberations, the Boards have decided tentatively that the transaction price should be allocated to “segments” of a contract; each segment may comprise one or more performance obligations. A joint IASB-FASB exposure draft (ED) is expected in the second quarter of 2010.

Fair value measurement
In May 2009 the IASB published an ED Fair Value Measurement, which was based on U.S. Statement 157 Fair Value Measurements. The proposals in the ED are intended to replace the fair value measurement guidance contained in individual IFRSs with a single, unified definition of fair value, as well as provide further authoritative guidance on the application of fair value measurement in inactive markets. The ED proposes a framework for measuring fair value and proposes disclosures about fair value measurements. The proposals in the ED explain how to measure fair value when it already is required by existing IFRSs. The proposals in the ED do not introduce new fair value measurements, nor do they eliminate the practicability exceptions to fair value measurements that exist currently in certain standards. The FASB intends to consider the comment letters to the IASB to determine whether it should propose amendments to FAS 157 in order to achieve a converged standard. The IASB intends to issue a standard, and the FASB an amended standard if necessary, on fair value measurement in the third quarter of 2010.

Joint ventures
The IASB is working on a short-term convergence project with the FASB, partly to reduce the main differences between IAS 31 Interests in Joint Ventures and U.S. GAAP. In September 2007 the IASB published an ED Joint Arrangements, which proposed accounting for joint arrangements based on the contractual rights and obligations agreed to by the parties to joint arrangements; the legal form of the arrangement would no longer be the most significant consideration in determining the accounting for joint arrangements. The ED proposed that an entity recognise an interest in a joint venture, previously called a “jointly controlled entity”, using the equity method; proportionate consolidation would not be permitted. A final standard is expected in the first quarter of 2010.

Leases
In March 2009 the IASB and the FASB published a joint DP Leases – Preliminary Views. As a result of subsequent redeliberations, the Boards have reconfirmed tentatively that a lessee would recognise in its financial statements a “right-of-use” asset representing its right to use the leased asset, and a liability representing its obligation to pay lease rentals. The Boards have decided tentatively that a lessor would recognise in its financial statements a receivable representing its right to receive lease rentals, and a liability representing its performance obligation under the lease; the lessor would recognise revenue over the lease term as it satisfies its performance obligation. A joint IASB-FASB ED is expected in the second quarter of 2010.

Provisions and contingencies
In June 2005 the IASB published an ED of Proposed Amendments to IAS 37 Provisions, Contingent Liabilities and Contingent Assets and IAS 19 Employee Benefits. The ED proposed that the term “contingency” would be used to describe uncertainty about the level of benefits (obligations) inherent in an asset (liability), rather than uncertainty about whether the asset (liability) exists. Probability would not be a criterion for the recognition of an asset or liability. As part of its redeliberations of the proposals in the ED, the Board’s discussions have included that:

- existence of a present obligation distinguishes a liability from a business risk;
- the term “stand ready obligation” would be used to describe situations when there is uncertainty about the outflow of economic benefits required to settle a present obligation, but not when there is an uncertainty about its existence; and
- liabilities would be measured using an expected cash flow technique.
Following changes made to its proposals during redeliberations, the Board plans to issue a limited scope ED of its proposed measurement guidance late in 2009, with a revised standard being issued in the third quarter of 2010.

**Rate-regulated activities**

In July 2009 the IASB issued ED *Rate-regulated Activities*, as the first step in developing an IFRS that would define regulatory assets and regulatory liabilities, provide recognition and measurement guidance for such assets and liabilities, and specify related disclosures. The ED proposes to measure regulatory assets and regulatory liabilities at the present value of expected future cash flows, both on initial recognition and subsequent remeasurement. A final standard is expected in the first half of 2010.
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