CHAPTER 18

REVENUE

This IFRS Supplement provides expanded discussions of accounting guidance under International Financial Reporting Standards (IFRS) for the topics in Intermediate Accounting. The discussions are organized according to the chapters in Intermediate Accounting (13th or 14th Editions) and therefore can be used to supplement the U.S. GAAP requirements as presented in the textbook. Assignment material is provided for each supplement chapter, which can be used to assess and reinforce student understanding of IFRS.

CURRENT ENVIRONMENT

Most revenue transactions pose few problems for revenue recognition. This is because, in many cases, the transaction is initiated and completed at the same time. However, not all transactions are that simple. For example, consider a customer who enters into a mobile phone contract with a company such as Vodafone (GBR). The customer is often provided with a package that may include a handset, free minutes of talk time, data downloads, and text messaging service. In addition, some providers will bundle that with a fixed-line broadband service. At the same time, customers may pay for these services in a variety of ways, possibly receiving a discount on the handset, then paying higher prices for connection fees, and so forth. In some cases, depending on the package purchased, the company may provide free applications in subsequent periods. How then should the various pieces of this sale be reported by Vodafone? The answer is not obvious.

It is therefore not surprising that a recent survey of financial executives noted that the revenue recognition process is increasingly more complex to manage, prone to error, and material to financial statements compared to any other area in financial reporting. The report went on to note that revenue recognition is a top fraud risk and that regardless of the accounting rules followed (IFRS or U.S. GAAP), the risk or errors and inaccuracies in revenue reporting is significant.¹

Indeed, both the IASB and the FASB indicate that the present state of reporting for revenue is unsatisfactory. IFRS is criticized because it lacks guidance in a number of areas. For example, IFRS has one basic standard on revenue recognition—IAS 18—plus some limited guidance related to certain minor topics. In contrast, U.S. GAAP has numerous standards related to revenue recognition (by some counts over 100), but many believe the standards are often inconsistent with one another. Thus, the accounting for revenues provides a most fitting contrast of the principles-based (IFRS) and rules-based (U.S. GAAP) approaches. While both sides have their advocates, the IASB and FASB recognize a number of deficiencies in this area.²

Unfortunately, inappropriate recognition of revenue can occur in any industry. Products that are sold to distributors for resale pose different risks than products or services that are sold directly to customers. Sales in high-technology industries, where rapid product obsolescence is a significant issue, pose different risks than sales of inventory with a longer life, such as farm or construction equipment, automobiles, trucks, and appliances.³

¹See www.prweb.com/releases/RecognitionRevenue/IFRS/prweb1648994.htm.

²See, for example, "Preliminary Views on Revenue Recognition in Contracts with Customers," IASB/FASB Discussion Paper (December 19, 2008). Some of the problems noted are that U.S. GAAP has so many standards that at times they are inconsistent with each other in applying basic principles. In addition, even with the many standards, no guidance is provided for service transactions. Conversely, IFRS has a lack of guidance in certain fundamental areas such as multiple-deliverable arrangements, which are becoming increasingly common. In addition, there is inconsistency in applying revenue recognition principles to long-term contracts versus other elements of revenue recognition.

³Adapted from American Institute of Certified Public Accountants, Inc., Audit Issues in Revenue Recognition (New York: AICPA, 1999).

As a consequence, restatements for improper revenue recognition are relatively common and can lead to significant share price adjustments.



U.S. GAAP uses concepts, such as realized or realizable, and earned as the basis for recognizing revenue.

Guidelines for Revenue Recognition

Revenue arises from ordinary operations and is referred to by various names such as sales, fees, rent, interest, royalties, and service revenue. Gains, on the other hand, may or may not arise in the normal course of operations. Typical gains are gain on sale of non-current assets or unrealized gains related to investments or non-current assets. The primary issue related to revenue recognition relates to when to recognize the revenue. The revenue recognition principle indicates that revenue is recognized when it is probable that the economic benefits will flow to the company and the benefits can be measured reliably.⁴

Four revenue transactions are recognized in accordance with this principle:

- **1.** Companies recognize revenue from selling products at the date of sale. This date is usually interpreted to mean the date of delivery to customers.
- **2.** Companies recognize revenue from services provided, when services have been performed and are billable.
- **3.** Companies recognize revenue from permitting others to use enterprise assets, such as interest, rent, and royalties, as time passes or as the assets are used.
- **4.** Companies recognize revenue from disposing of assets other than products at the date of sale.

These revenue transactions are diagrammed in Illustration 18-1.

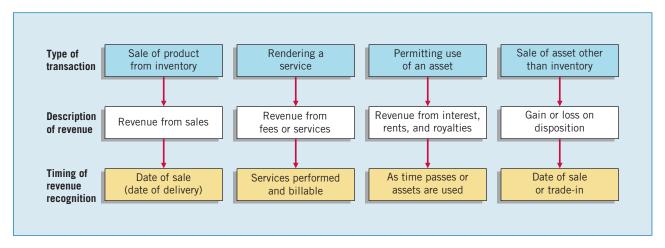


ILLUSTRATION 18-1

Revenue Recognition Classified by Nature of Transaction

U.S. GAAP PERSPECTIVE



U.S. GAAP provides separate definitions for revenues and gains. IFRS defines income, which includes both revenues and gains.

The preceding statements are the basis of accounting for revenue transactions. In general, companies recognize revenue at the point of sale (sale basis). However, in practice there are departures from this recognition point, depending on the circumstances.⁵

⁴A more formal definition of revenue is as follows: "gross inflow of economic benefits during the period arising in the ordinary activities of an entity when those inflows result in increases in equity, other than increases relating to contributions from equity participants." [1]

⁵The IASB and FASB are now involved in a joint project on revenue recognition. The purpose of this project is to develop comprehensive conceptual guidance on when to recognize revenue. Presently, the Boards are evaluating a customer-consideration model. In this model, a company accounts for the contract asset or liability that arises from the rights and performance obligations in an enforceable contract with the customer. At contract inception, the rights in the contract are measured at the amount of the promised customer payment (that is, the customer consideration). That amount is then allocated to the individual performance obligations identified within the contract in proportion to the standalone selling price of each good or service underlying the performance obligation. It is hoped that this approach (rather than using the current criteria based on probable economic benefits and reliable measurement) will lead to a better basis for revenue recognition. (See www.fasb.org/project/revenue_recognition.shtml.)

Measurement of Sales Revenue

Revenue should be measured at the fair value of consideration received or receivable.

Any trade discounts or volume rebates should reduce consideration received or receivable and the related revenue. In addition, if the payment is delayed, the seller should impute an interest rate for the difference between the cash or cash equivalent price and the deferred amount. In essence, the seller is financing the sale and should record interest revenue over the payment term. Presented on the next pages are a series of transactions that illustrate these points, beginning with Illustration 18-2.

VOLUME DISCOUNT

Facts: Sansung Company has an arrangement with its customers that it will provide a 3% volume discount to its customers if they purchase at least €2 million of its product during the calendar year. On March 31, 2011, Sansung has made sales of €700,000 to Artic plc. In the previous two years, Sansung sold over €3,000,000 to Artic in the period April 1 to December 31.

Question: How much revenue should Sansung recognize for the first three months of 2011?

Solution: In this case, Sansung should reduce its revenue by €21,000 (€700,000 × 3%) because it is probable that it will provide this rebate. Revenue should therefore be reported at €679,000 (€700,000 - €21,000). To not recognize this volume discount overstates Sansung's revenue for the first three months of 2011.

ILLUSTRATION 18-2

Revenue Measurement— Volume Discount

LONG-TERM CONTRACTS (CONSTRUCTION)

For the most part, companies recognize revenue at the point of sale (delivery) because at point of sale the risks and rewards of ownership are transferred and the exchange price is known. Under certain circumstances, however, companies recognize revenue prior to completion and delivery. The most notable example is longterm construction contract accounting, which uses the percentage-of-completion method.6

Long-term contracts frequently provide that the seller (builder) may bill the purchaser at intervals, as it reaches various points in the project. Examples of long-term contracts are construction-type contracts, development of military and commercial aircraft, weapons-delivery systems, and space exploration hardware. When the project consists of separable units, such as a group of buildings or miles of roadway, contract provisions may provide for delivery in installments. In that case, the seller would bill the buyer and transfer title at stated stages of completion, such as the completion of each building unit or every 10 miles of road. The accounting records should record sales when installments are "delivered."

Two distinctly different methods of accounting for long-term construction contracts are recognized. They are:

 Percentage-of-completion method. Companies recognize revenues and gross profits each period based upon the progress of the construction—that is, the percentage

⁶Some service contracts are long-term; these arrangements follow the same accounting as long-term construction contracts. Service contracts are discussed later in the chapter.

of completion. The company accumulates construction costs **plus gross profit earned to date** in an inventory account (Construction in Process), and it accumulates progress billings in a contra inventory account (Billings on Construction in Progress).

• Cost-recovery (zero-profit) method. In some cases, contract revenue is recognized only to the extent of costs incurred that are expected to be recoverable. Once all costs are recognized, profit is recognized. The company accumulates construction costs in an inventory account (Construction in Process), and it accumulates progress billings in a contra inventory account (Billings on Construction in Process).

The rationale for using percentage-of-completion accounting is that under most of these contracts, the buyer and seller have enforceable rights. The buyer has the legal right to require specific performance on the contract. The seller has the right to require progress payments that provide evidence of the buyer's ownership interest. As a result, a continuous sale occurs as the work progresses. Companies should recognize revenue according to that progression.

Companies *must* use the percentage-of-completion method when estimates of progress toward completion, revenues, and costs can be estimated reliably and **all of the following conditions** exist.

- 1. Total contract revenue can be measured reliably;
- **2.** It is probable that the economic benefits associated with the contract will flow to the company;
- **3.** Both the contract costs to complete the contract and the stage of contract completion at the end of the reporting period can be measured reliably; and
- **4.** The contract costs attributable to the contract can be clearly identified and measured reliably so the actual contract costs incurred can be compared with prior estimates. [2]

Companies should use the cost-recovery method when one of the following conditions applies:

- When a company cannot meet the conditions for using the percentage-of-completion method, *or*
- When there are inherent hazards in the contract beyond the normal, recurring business risks.

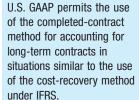
The presumption is that percentage-of-completion is the better method. Therefore, companies should use the cost-recovery method only when the percentage-of-completion method is inappropriate. We discuss the two methods in more detail in the following sections.

Cost-Recovery (Zero-Profit) Method

During the early stages of a contract, a company like **Alcatel-Lucent** (FRA) may not be able to estimate reliably the outcome of a long-term construction contract. Nevertheless, Alcatel-Lucent is confident that it will recover the contract costs incurred. In this case, Alcatel-Lucent uses the **cost-recovery method** (sometimes referred to as the zero-profit method). This method recognizes revenue only to the extent of costs incurred that are expected to be recoverable. Only after all costs are incurred is gross profit recognized.

To illustrate the cost-recovery method for a bridge project, Hardhat Construction would report the following revenues and costs for 2010–2012, as shown in Illustration 18-3.

U.S. GAAP PERSPECTIVE



	To Date	Recognized in Prior Years	Recognized in Current Year
2010			
Revenues (costs incurred)	€1,000,000		€1,000,000
Costs Cross profit			1,000,000 € 0
Gross profit	<u>€ 0</u>		€ 0
2011			
Revenues (costs incurred)	€2,916,000	€ 1,000,000	€1,916,000
Costs	2,916,000	1,000,000	1,916,000
Gross profit	<u>€ 0</u>	<u>€ 0</u>	ŧ U ======
2012			
Revenues (€4,500,000 × 100%)	€4,500,000	€ 2,916,000	€1,584,000
Costs	4,050,000	2,916,000	1,134,000
Gross profit	<u>€ 450,000</u>	<u>€ 0</u>	<u>€ 450,000</u>

ILLUSTRATION 18-3 Cost-Recovery Method Revenue, Costs, and Gross Profit by Year

Illustration 18-4 shows Hardhat's entries to recognize revenue and gross profit each year and to record completion and final approval of the contract.

	20	10	20)11	20	12
Construction Expense Revenue from Long-Term Contract	1,000,000	1.000.000	1,916,000	1.916.000		
(To recognize costs and related expenses)		1,000,000		1,010,000		
Construction in Process (Gross Profit)					450,000	
Construction Expense					1,134,000	
Revenue from Long-Term Contract						1,584,000
(To recognize costs and related expenses)						
Billings on Construction in Process					4,500,000	
Construction in Process						4,500,000
(To record completion of the contract)						

ILLUSTRATION 18-4

Journal Entries— Cost-Recovery Method

As indicated, no gross profit is recognized in 2010 and 2011. In 2012, Hardhat then recognizes gross profit and closes the Billings and Construction in Process accounts.

Illustration 18-5 compares the amount of gross profit that Hardhat Construction Company would recognize for the bridge project under the two revenue recognition methods.

	Percentage-of-Completion	Cost-Recovery
2010	€125,000	€ 0
2011	199,000	0
2012	126,000	450,000

ILLUSTRATION 18-5

Comparison of Gross Profit Recognized under Different Methods

Under the cost-recovery method, Hardhat Construction would report its long-term construction activities as shown in Illustration 18-6.

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ILLUSTRATION 18-6

Financial Statement Presentation—Cost-Recovery Method

HARDHAT CONSTRUCTION COMPANY					
Income Statement	2010	2011	2012		
Revenue from long-term contracts	€1,000,000	€1,916,000	€1,584,000		
Costs of construction	1,000,000	1,916,000	1,134,000		
Gross profit	<u>€ 0</u>	€ 0	<u>€ 450,000</u>		

Statement of Financial Position (12	/31)	2010	2011	2012
Current assets Inventories Construction in process Less: Billings Costs in excess of billings Accounts receivable Current liabilities Billings Less: Construction in process Billing in excess of costs	€1,000,000 900,000 €3,300,000 2,916,000	€ 100,000 150,000	€ 800,000	€ -0- -0-
and recognized profits			€ 384,000	-0-

Note 1. Summary of significant accounting policies.

Long-Term Construction Contracts. The company recognizes revenues and reports profits from long-term construction contracts, its principal business, under the cost-recovery method. These contracts generally extend for periods in excess of one year. Contract costs and billings are accumulated during the periods of construction, and revenues are recognized only to the extent of costs incurred that are expected to be recoverable. Only after all costs are incurred is net income recognized. Costs included in construction in process include direct material, direct labor, and project-related overhead. Corporate general and administrative expenses are charged to the periods as incurred.

Loss on an Unprofitable Contract

To illustrate the accounting for an **overall loss on a long-term contract**, assume that at December 31, 2011, Hardhat Construction Company estimates the costs to complete the bridge contract at €1,640,250 instead of €1,134,000. Revised estimates for the bridge contract are as follows.

	2010	2011
	Original Estimates	Revised Estimates
Contract price Estimated total cost	€4,500,000 4,000,000	€4,500,000 4,556,250*
Estimated gross profit	<u>€ 500,000</u>	
Estimated loss		<u>€ (56,250)</u>
*(€2,916,000 + €1,640,25	50)	

Under the percentage-of-completion method, Hardhat recognized €125,000 of gross profit in 2010. This amount must be offset in 2011 because it is no longer expected to be realized. In addition, since losses must be recognized as soon as estimable, the company must recognize the total estimated loss of €56,250 in 2011. Therefore, Hardhat must recognize a total loss of €181,250 (€125,000 + €56,250) in 2011.

Illustration 18-7 shows Hardhat's computation of the revenue to be recognized in 2011.

Revenue recognized in 2011: €4,500,000 Contract price Percent complete × 64%* Revenue recognizable to date 2.880.000 Less: Revenue recognized prior to 2011 1,125,000 Revenue recognized in 2011 €1,755,000 *Cost to date (12/31/11) €2,916,000 Estimated cost to complete 1,640,250 Estimated total costs €4,556,250 Percent complete: €2,916,000 ÷ €4,556,250 = 64%

ILLUSTRATION 18-7

Computation of Revenue Recognizable, 2011— Unprofitable Contract

To compute the construction costs to be expensed in 2011, Hardhat adds the total loss to be recognized in 2011 (€125,000 + €56,250) to the revenue to be recognized in 2011. Illustration 18-8 shows this computation.

	€1,755,000	
€125,000		
56,250	181,250	
	€1,936,250	
		€125,000

ILLUSTRATION 18-8

Computation of Construction Expense, 2011—Unprofitable Contract

Hardhat Construction would record the long-term contract revenues, expenses, and loss in 2011 as follows.

> Construction Expenses 1,936,250

Construction in Process (Loss) 181,250 Revenue from Long-Term Contracts 1,755,000

At the end of 2011, Construction in Process has a balance of €2,859,750 as shown below.7

Construction in Process			
2010 Construction costs	1,000,000		
2010 Recognized gross profit	125,000		
2011 Construction costs	1,916,000	2011 Recognized loss	181,250
Balance	2,859,750		

ILLUSTRATION 18-9

Content of Construction in Process Account at End of 2011—Unprofitable Contract

Under the cost-recovery method, Hardhat also would recognize the contract loss of €56,250, through the following entries in 2011 (the year in which the loss first became evident).

Construction Expenses	1,916,000	
Revenue from Long-Term Contracts		1,916,000
Loss from Long-Term Contracts	56,250	
Construction in Process (Loss)		56,250

⁷If the costs in 2012 are €1,640,250 as projected, at the end of 2012 the Construction in Process account will have a balance of €1,640,250 + €2,859,750, or €4,500,000, equal to the contract price. When the company matches the revenue remaining to be recognized in 2012 of €1,620,000 [€4,500,000 (total contract price) - €1,125,000 (2010) - €1,755,000 (2011)] with the construction expense to be recognized in 2012 of €1,620,000 [total costs of €4,556,250 less the total costs recognized in prior years of €2,936,250 (2010, €1,000,000; 2011, €1,936,250)], a zero profit results. Thus the total loss has been recognized in 2011, the year in which it first became evident.

Just as the Billings account balance cannot exceed the contract price, neither can the balance in Construction in Process exceed the contract price. In circumstances where the Construction in Process balance exceeds the billings, the company can deduct the recognized loss from such accumulated costs on the statement of financial position. That is, under both the percentage-of-completion and the cost-recovery methods, the provision for the loss (the credit) may be combined with Construction in Process, thereby reducing the inventory balance. In those circumstances, however (as in the 2011 example above), where the billings exceed the accumulated costs, Hardhat must report separately on the statement of financial position, as a current liability, the amount of the estimated loss. That is, under both the percentage-of-completion and the cost-recovery methods, Hardhat would take the €56,250 loss, as estimated in 2011, from the Construction in Process account and report it separately as a current liability titled "Estimated liability from long-term contracts."



U.S. GAAP provides more detailed guidance for multiple-deliverable arrangements relative to IFRS.

MULTIPLE-DELIVERABLE ARRANGEMENTS

One of the most difficult issues related to revenue recognition involves **multiple-deliverable arrangements** (MDAs). MDAs provide multiple products or services to customers as part of a single arrangement. The major accounting issues related to this type of arrangement are how to allocate the revenue to the various products and services and how to allocate the revenue to the proper period.

These issues are particularly complex in the technology area. Many devices have contracts that typically include such multiple deliverables as hardware, software, professional services, maintenance, and support—all of which are valued and accounted for differently. A classic example relates to the **Apple** (USA) iPhone and its AppleTV product. Basically, until a recent rule change, revenues and related costs were accounted for on a subscription basis over a period of years. The reason was that Apple provides future unspecified software upgrades and other features without charge. It was argued that Apple should defer a significant portion of the cash received for the iPhone and recognize it over future periods. At the same time, engineering, marketing, and warranty costs were expensed as incurred. As a result, Apple reported conservative numbers related to its iPhone revenue. However, as a result of efforts to more clearly define the various services related to an item such as the iPhone, Apple is now able to report more revenue at the point of sale.

In general, all units in a multiple-deliverable arrangement are considered separate units of accounting, provided that:

- 1. A delivered item has value to the customer on a standalone basis; and
- 2. The arrangement includes a general right of return relative to the delivered item; and
- **3.** Delivery or performance of the undelivered item is considered probable and substantially in the control of the seller.

Once the separate units of accounting are determined, the amount paid for the arrangement is allocated among the separate units based on **relative fair value**. A company determines fair value based on what the vendor could sell the component for on a standalone basis. If this information is not available, the seller may rely on third-party evidence or if not available, the seller may use its best estimate of what the item might sell for as a standalone unit. [3]⁸ Illustration 18-10 identifies the steps in the evaluation process.

⁸The accounting requirements to account for MDAs under IFRS are general in nature. While IFRS requires that revenue be measured at the fair value of the consideration received or receivable for each separable component of the transaction, the standards do not dictate the method to be used in determining the fair value of each component. Similarly, IFRS does not prescribe a method for allocating revenue to the components, as long as the method selected reflects a transaction's economic substance.

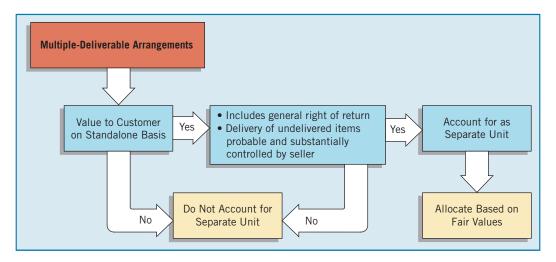


ILLUSTRATION 18-10 Multiple-Deliverable **Evaluation Process**

Presented in Illustrations 18-11 and 18-12 are two examples of the accounting for MDAs.

MULTIPLE DELIVERABLES

Facts: Lopez Company enters into a contract to build, run, and maintain a highly complex piece of electronic equipment for a period of 5 years, commencing upon delivery of the equipment. There is a fixed fee for each of the build, run, and maintenance deliverables, and any progress payments made are not refundable. In addition, there is a right of return in the arrangement. All the deliverables have a standalone value, and there is verifiable evidence of the selling price for the building and maintenance but not for running the equipment.

Question: Should Lopez separate and then measure and allocate the amounts paid for the MDA?

Solution: Assuming delivery (performance) is probable and Lopez controls any undelivered items, Lopez determines whether the components have standalone value. The components of the MDA are the equipment, maintenance of the equipment, and running the equipment; each component has a standalone value. Lopez can determine standalone values of equipment and the maintenance agreement by third-party evidence of fair values. The company then makes a best estimate of the selling price for running of the equipment. Lopez next applies the relative fair value method at the inception of the MDA to determine the proper allocation to each component. Once the allocation is performed, the company recognizes revenue independently for each component using regular revenue recognition criteria.

ILLUSTRATION 18-11

MDA—Equipment and Maintenance

ILLUSTRATION 18-12

MDA—Product, Installation, and Service

PRODUCT, INSTALLATION, AND SERVICE

Facts: Handler Company is an experienced manufacturer of equipment used in the construction industry. Handler's products range from small to large individual pieces of automated machinery to complex systems containing numerous components. Unit selling prices range from \$600,000 to \$4,000,000 and are quoted inclusive of installation and training. The installation process does not involve changes to the features of the equipment and does not require proprietary information about the equipment in order for the installed equipment to perform to specifications. Handler has the following arrangement with Chai Company.

- Chai purchases equipment from Handler for a price of \$2,000,000 and chooses Handler to
 do the installation. Handler charges the same price for the equipment irrespective of whether
 it does the installation or not. (Some companies do the installation themselves because they
 either prefer their own employees to do the work or because of relationships with other customers.) The price of the installation service is estimated to have a fair value of \$20,000.
- The fair value of the training sessions is estimated at \$50,000.
- Chai is obligated to pay Handler the \$2,000,000 upon the delivery and installation of the
 equipment. Handler delivers the equipment on September 1, 2011, and completes the installation of the equipment on November 1, 2011. Training related to the equipment starts once
 the installation is completed and lasts for 1 year. The equipment has a useful life of 10 years.

Questions: (a) What are the standalone units for purposes of accounting for the sale of the equipment? (b) If there is more than one standalone unit, how should the fee of \$2,000,000 be allocated to various components?

Solution:

- (a) The first condition for separation into a standalone unit for the equipment is met. That is, the equipment, installation, and training are three separate components.
- (b) The total revenue of \$2,000,000 should be allocated to the three components based on their relative fair values. In this case, the fair value of the equipment should be considered \$2,000,000, the installation fee is \$20,000, and the training is \$50,000. The total fair value to consider is \$2,070,000 (\$2,000,000 + \$20,000 + \$50,000). The allocation is as follows.

Equipment \$1,932,367 (\$2,000,000 \div \$2,070,000) \times \$2,000,000 Installation 19,324 (\$20,000 \div \$2,070,000) \times \$2,000,000 Training 48,309 (\$50,000 \div \$2,070,000) \times \$2,000,000

Handler makes the following entries on November 1, 2011.

November 1, 2011

Cash 2,000,000
Installation Revenue 19,324
Unearned Training Revenue 48,309
Sales 1,932,367

The sale of the equipment should be recognized once the installation is completed on November 1, 2011, and the installation fee also should be recognized because these services have been provided. The training revenues should be allocated on a straightline basis starting on November 1, 2011, or \$4,026 (\$48,309 \div 12) per month for one year (unless a more appropriate method using the percentage-of-completion method is warranted). The journal entry to recognize the training revenue for two months in 2011 is as follows.

December 31, 2011

Unearned Training Revenue 8,052 Training Revenue ($$4,026 \times 2$)

8,052

Therefore, the total revenue recognized at December 31, 2011, is \$1,959,743 (\$1,932,367 + \$19,324 + \$8,052). Handler makes the following journal entry to recognize the training revenue in 2012.

December 31, 2012

Unearned Training Revenue 40,257

Training Revenue (\$48,309 - \$8,052) 40,257



AUTHORITATIVE LITERATURE

Authoritative Literature References

- [1] International Accounting Standard 18, *Revenue* (London, U.K.: International Accounting Standards Committee Foundation, 2001), par. 7.
- [2] International Accounting Standard 11, Construction Contracts (London, U.K.: International Accounting Standards Committee Foundation, 2001), par. 23.
- [3] International Accounting Standard 18, *Revenue* (London, U.K.: International Accounting Standards Committee Foundation, 2001), par. 13.

QUESTIONS

- **1.** What is viewed as a major criticism of IFRS as regards revenue recognition?
- 2. What is the revenue recognition principle?
- 3. When is revenue recognized in the following situations:
 (a) revenue from selling products, (b) revenue from services rendered, (c) revenue from permitting others to use enterprise assets, and (d) revenue from disposing of assets other than products?
- 4. How should revenue be measured?
- **5.** What are the two basic methods of accounting for long-term construction contracts? Indicate the circumstances

- that determine when one or the other of these methods should be used.
- **6.** What are the two types of losses that can become evident in accounting for long-term contracts? What is the nature of each type of loss? How is each type accounted for?
- **7.** When is revenue recognized under the cost-recovery method?
- **8.** Explain a multiple-deliverable arrangement. What is the major accounting issue related to these arrangements?
- **9.** Explain how multiple-deliverable arrangements are measured and reported.

BRIEF EXERCISES

BE18-1 Turner, Inc. began work on a \$7,000,000 contract in 2010 to construct an office building. During 2010, Turner, Inc. incurred costs of \$1,700,000, billed their customers for \$1,200,000, and collected \$960,000. At December 31, 2010, the estimated future costs to complete the project total \$3,300,000. Prepare Turner's 2010 journal entries using the percentage-of-completion method.

BE18-2 Use the information from BE18-1, but assume Turner uses the cost-recovery method. Prepare the company's 2010 journal entries.

BE18-3 O'Neil, Inc. began work on a \$7,000,000 contract in 2010 to construct an office building. O'Neil uses the percentage-of-completion method. At December 31, 2010, the balances in certain accounts were

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Construction in Process \$2,450,000; Accounts Receivable \$240,000; and Billings on Construction in Process \$1,400,000. Indicate how these accounts would be reported in O'Neil's December 31, 2010, statement of financial position.

BE18-4 Archer Construction Company began work on a \$420,000 construction contract in 2010. During 2010, Archer incurred costs of \$278,000, billed its customer for \$215,000, and collected \$175,000. At December 31, 2010, the estimated future costs to complete the project total \$162,000. Prepare Archer's journal entry to record profit or loss in 2010, if any, using (a) the percentage-of-completion method and (b) the cost-recovery method.

EXERCISES

E18-1 (Recognition of Profit on Long-Term Contracts) During 2010, Nilsen Company started a construction job with a contract price of \$1,600,000. The job was completed in 2012. The following information is available.

	2010	2011	2012
Costs incurred to date	\$400,000	\$825,000	\$1,070,000
Estimated costs to complete	600,000	275,000	-0-
Billings to date	300,000	900,000	1,600,000
Collections to date	270,000	810,000	1,425,000

Instructions

- (a) Compute the amount of gross profit to be recognized each year, assuming the percentage-ofcompletion method is used.
- **(b)** Prepare all necessary journal entries for 2011.
- (c) Compute the amount of gross profit to be recognized each year, assuming the cost-recovery method is used.

E18-2 (Recognition of Revenue on Long-Term Contract and Entries) Hamilton Construction Company uses the percentage-of-completion method of accounting. In 2010, Hamilton began work under contract #E2-D2, which provided for a contract price of \$2,200,000. Other details are as follows.

	2010	2011
Costs incurred during the year	\$640,000	\$1,425,000
Estimated costs to complete, as of December 31	960,000	-0-
Billings during the year	420,000	1,680,000
Collections during the year	350,000	1,500,000

Instructions

- (a) What portion of the total contract price would be recognized as revenue in 2010? In 2011?
- **(b)** Assuming the same facts as those above except that Hamilton uses the cost-recovery method of accounting, what portion of the total contract price would be recognized as revenue in 2011?
- (c) Prepare a complete set of journal entries for 2010 (using the percentage-of-completion method).

E18-3 (Multiple-Deliverable Arrangement) Appliance Center is an experienced home appliance dealer. Appliance Center also offers a number of services together with the home appliances that it sells. Assume that Appliance Center sells ovens on a standalone basis. Appliance Center also sells installation services and maintenance services for ovens. However, Appliance Center does not offer installation or maintenance services to customers who buy ovens from other vendors. Pricing for ovens is as follows.

Oven only	\$	800
Oven with installation service		850
Oven with maintenance services		975
Oven with installation and maintenance services	1	,000

In each instance in which maintenance services are provided, the maintenance service is separately priced within the arrangement at \$175. Additionally, the incremental amount charged by Appliance Center for installation approximates the amount charged by independent third parties. Ovens are sold subject to a general right of return. If a customer purchases an oven with installation and/or maintenance services,

in the event Appliance Center does not complete the service satisfactorily, the customer is only entitled to a refund of the portion of the fee that exceeds \$800.

Instructions

- (a) Assume that a customer purchases an oven with both installation and maintenance services for \$1,000. Based on its experience, Appliance Center believes that it is probable that the installation of the equipment will be performed satisfactorily to the customer. Assume that the maintenance services are priced separately. Explain whether the conditions for a multiple-deliverable arrangement exist in this situation.
- (b) Indicate the amount of revenues that should be allocated to the oven, the installation, and to the maintenance contract.

PROBLEMS

P18-1 (Long-Term Contract with an Overall Loss) On July 1, 2010, Torvill Construction Company Inc. contracted to build an office building for Gumbel Corp. for a total contract price of €1,900,000. On July 1, Torvill estimated that it would take between 2 and 3 years to complete the building. On December 31, 2012, the building was deemed substantially completed. Following are accumulated contract costs incurred, estimated costs to complete the contract, and accumulated billings to Gumbel for 2010, 2011, and 2012.

	At	At	At
	12/31/10	12/31/11	12/31/12
Contract costs incurred to date	€ 300,000	€1,200,000	€2,100,000
Estimated costs to complete the contract	1,200,000	800,000	-0-
Billings to Gumbel	300,000	1,100,000	1,850,000

Instructions

- (a) Using the percentage-of-completion method, prepare schedules to compute the profit or loss to be recognized as a result of this contract for the years ended December 31, 2010, 2011, and 2012. (Ignore income taxes.)
- **(b)** Using the cost-recovery method, prepare schedules to compute the profit or loss to be recognized as a result of this contract for the years ended December 31, 2010, 2011, and 2012. (Ignore income taxes.)

P18-2 (Cost-Recovery Method) Monat Construction Company, Inc., entered into a firm fixed-price contract with Hyatt Clinic on July 1, 2010, to construct a four-story office building. At that time, Monat estimated that it would take between 2 and 3 years to complete the project. The total contract price for construction of the building is £4,400,000. Monat appropriately accounts for this contract under the cost-recovery method in its financial statements and for income tax reporting. The building was deemed substantially completed on December 31, 2012. Estimated percentage of completion, accumulated contract costs incurred, estimated costs to complete the contract, and accumulated billings to the Hyatt Clinic under the contract are shown below.

	At	At	At
	December	December	December
	31, 2010	31, 2011	31, 2012
Percentage of completion	30%	70%	100%
Contract costs incurred	£1,140,000	£3,290,000	£4,800,000
Estimated costs to complete the contract	£2,660,000	£1,410,000	-0-
Billings to Hyatt Clinic	£1,400,000	£2,500,000	£4,300,000

Instructions

- (a) Prepare schedules to compute the amount to be shown as "Cost of uncompleted contract in excess of related billings" or "Billings on uncompleted contract in excess of related costs" at December 31, 2010, 2011, and 2012. Ignore income taxes. Show supporting computations in good form.
- **(b)** Prepare schedules to compute the profit or loss to be recognized as a result of this contract for the years ended December 31, 2010, 2011, and 2012. Ignore income taxes. Show supporting computations in good form.

USING YOUR JUDGMENT

FINANCIAL REPORTING

Financial Reporting Problem

Marks and Spencer plc (M&S)

The financial statements of M&S can be accessed at the book's companion website, www.wiley.com/college/kiesoifrs.

Instructions

Refer to M&S's financial statements and the accompanying notes to answer the following questions.



- (a) What were M&S's sales for 2008?
- (b) What was the percentage of increase or decrease in M&S's sales from 2007 to 2008? From 2006 to 2007? From 2006 to 2008?
- (c) In its notes to the financial statements, what criteria does M&S use to recognize revenue?
- (d) How does M&S account for discounts and loyalty schemes? Does the accounting conform to accrual-accounting concepts? Explain.

BRIDGE TO THE PROFESSION

Professional Research

Employees at your company disagree about the accounting for sales returns. The sales manager believes that granting more generous return provisions and allowing customers to order items on a bill and hold basis can give the company a competitive edge and increase sales revenue. The controller cautions that, depending on the terms granted, loose return or bill and hold provisions might lead to non-IFRS revenue recognition. The company CFO would like you to research the issue to provide an authoritative answer.

Instructions

Access the IFRS authoritative literature at the IASB website (http://eifrs.iasb.org/). When you have accessed the documents, you can use the search tool in your Internet browser to respond to the following questions. (Provide paragraph citations.)

- (a) What is the authoritative literature addressing revenue recognition when right of return exists?
- **(b)** What is meant by "right of return"? "Bill and hold"?
- (c) When there is a right of return, what conditions must the company meet to recognize the revenue at the time of sale?
- (d) What factors may impair the ability to make a reasonable estimate of future returns?
- **(e)** When goods are sold on a bill and hold basis, what conditions must be met to recognize revenue upon receipt of the order?

