

PAAinE

PRO-ACTIVE ACCOUNTING ACTIVITIES IN EUROPE

DISCUSSION PAPER
JULY 2007

| 3

Revenue Recognition — A European Contribution



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This paper has been prepared jointly by the staff of the German standard-setter, the Deutsches Rechnungslegungs Standards Committee (DRSC), and by the staff of the European Financial Reporting Advisory Group (EFRAG) as part of Europe's PAAinE initiative.

The paper has been approved and is being issued by the DRSC, EFRAG and the French standard-setter, the Conseil National de la Comptabilité (CNC). It has also been approved by the Co-ordinating Group of PAAinE, which comprises representatives of the issuers and also the standard-setters of The Netherlands, Poland, Spain, Sweden and the UK. The paper (in near-final form) was also considered at a quarterly meeting between EFRAG and representatives of the European National Standard-Setters (ENSS), and the representatives of the ENSS confirmed that they were content for the paper to be issued to stimulate debate.

The paper is available for downloading from the websites of the issuers and the intention is that it will also be made available on other ENSS websites. A limited number of copies will also be available in printed form.

Comment on any aspect of this paper is invited. Such comments should be sent:

(a) by email to either Commentletter@efrag.org or info@drsc.de

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so as to arrive no later than 10 December 2007. All comments received will be placed on the public record unless confidentiality is requested.

About the PAAinE

EFRAG and the European National Standard Setters have agreed to pool some of their resources and work together more closely so that Europe as a whole can participate more effectively in the global accounting debate. It was agreed that this initiative should in the beginning concentrate on long-term pro-active work. The objective of the initiative is to stimulate debate on important items on the IASB agenda at an early stage in the standard-setting process before the IASB formally issues its proposals. The initiative has the joint ambitions of representing a European point of view and exercising greater influence on the standard-setting process. This initiative is known as the 'Proactive Accounting Activities in Europe' (or PAAinE) initiative.

Several projects have commenced under the PAAinE initiative, and this paper is the result of the PAAinE project on Revenue Recognition.

Work carried out under the PAAinE initiative can take a number of different forms and the full objectives of the initiative are:

- to stimulate, carry out and manage pro-active development activities designed to encourage the debate in Europe on accounting matters and to enhance the quality of the pro-active input to the IASB;
- to co-ordinate and resource monitoring work of IASB and FASB projects; and
- to try to ensure, as far as is practicable, that the messages Europe gives the IASB are consistent.

A further description of the PAAinE initiative is available on the EFRAG website (www.efrag.org).

CONTENTS

SUMMARY OF CONTENTS

	<i>pages</i>
SUMMARY	7-9
INVITATION TO COMMENT	10-12
DISCUSSION	
1 Introduction	13-18
2 What is revenue?	19-26
3 When does revenue arise? (Part 1—Critical event approaches)	27-48
4 When does revenue arise? (Part 2—Continuous approaches)	49-64
5 Concluding remarks	65-74
APPENDICES	
I List of acknowledgments	75
II The existing literature on revenue accounting	76-82
III Measurement of revenue	83-90
IV The examples used in the paper	91-92
V Glossary	93-94

DETAILED CONTENTS

	<i>paragraphs</i>
SUMMARY	a-m
INVITATION TO COMMENT	
DISCUSSION	
1—Introduction	
Revenue is an important number	1.1-1.3
Weaknesses in the existing revenue standards	1.4-1.10
The joint IASB and FASB project on revenue recognition	1.11-1.16
Why this paper has been prepared	1.17-1.22
Terminology used in the paper	1.23-1.25
Scope of the paper	1.26-1.27
2—What is revenue?	
Concepts underlying the discussion in this paper	2.1-2.4
What does the Framework tell us about revenue?	2.5-2.13
<i>What does the Framework say?</i>	2.5-2.7
<i>What does the Framework mean?</i>	2.8-2.13
What other attributes should revenue have?	2.14-2.33
<i>Should revenue remain a gross notion?</i>	2.14-2.15
<i>Has revenue to be based on enforceable rights and obligations?</i>	2.16-2.18
<i>Revenue is some sort of measure of activity undertaken pursuant to a contract with a customer</i>	2.19-2.24
<i>What sort of activity pursuant to a contract with a customer should be measured?</i>	2.25-2.27
<i>Does revenue involve an exchange?</i>	2.28-2.29
<i>What does "in the course of ordinary activities" mean?</i>	2.30-2.33
A definition of revenue	2.34
3—When does revenue arise? (Part 1—Critical event approaches)	
What does the Framework say about when revenue arises?	3.1-3.4
Approach A—The complete contract fulfillment approach	3.5-3.15
<i>The approach explained</i>	3.5-3.8
<i>The approach applied to our five examples</i>	3.9
<i>Discussion</i>	3.10-3.15
Approach B—A modification of Approach A that focuses on rights to consideration	3.16-3.25
<i>The approach explained</i>	3.16-3.20
<i>The approach applied to our five examples</i>	3.21
<i>Discussion</i>	3.22-3.25
A variation on Approaches A and B—The substantive fulfillment approach	3.26-3.31
The building blocks of a revenue recognition approach	3.32-3.45
<i>The critical event approach</i>	3.33-3.35
<i>Perspectives</i>	3.36-3.39
<i>Customer acceptance</i>	3.40-3.45
The story so far	3.46-3.50
<i>Rights to consideration</i>	3.48-3.49
<i>Disaggregating contracts</i>	3.50
A modification of Approach B—Disaggregating the contract by reference to customer acceptance points	3.51-3.59

Revenue Recognition—A European Contribution

<i>The approach explained</i>	3.51-3.53
<i>If revenue could reverse, is it premature to recognise it?</i>	3.54-3.59
A second modification of Approach B—Disaggregating the contract by breaking it down into items of part-output that have value to the customer (Approach C)	3.60-3.72
<i>The approach explained</i>	3.60-3.66
<i>The approach applied to our five examples</i>	3.67
<i>Discussion</i>	3.68-3.72
A third modification of Approach B—Disaggregating the contract so that each and every performance obligation represents a separate part-contract	3.73-3.78
Some concluding remarks on this chapter's discussion	3.79-3.82
4—When does revenue arise? (Part 2—Continuous approaches)	
An alternative to the critical event approach—the continuous approach (Approach D)	4.1-4.2
The approach explained	4.3-4.22
<i>Different ways of measuring progress</i>	4.6-4.14
<i>Disaggregating a contract when applying the continuous approach</i>	4.15-4.18
<i>Reliability</i>	4.19-4.22
A general revenue recognition principle	4.23
The approach applied to various examples	4.24-4.30
The asset/liability model	4.31-4.37
Discussion	4.38-4.41
Further thoughts on the continuous approach	4.42-4.63
<i>Example 1: The sale of furniture in stock, with immediate delivery</i>	4.45
<i>Example 2: The sale of furniture that is not in stock and has to be made</i>	4.46-4.47
<i>Example 3: The sale of furniture in stock, with delivery in 90 days</i>	4.48-4.54
<i>Example 4: The sale of furniture that is to be delivered immediately by a sub-supplier</i>	4.55-4.57
<i>Example 5: The sale of furniture that has to be made and delivered by a sub-supplier</i>	4.58-4.63
5—Concluding remarks	-
Critical event v continuous approaches	5.1-5.7
Approach A: The complete contract fulfillment approach	5.8-5.10
Approach B: A modification of Approach A that focuses on rights to consideration	5.11-5.15
Approach C: Disaggregating the contract by breaking it down into items of part-output that have value to the customer	5.16-5.19
Approach D: The continuous approach	5.20-5.23
The approaches compared	5.24-5.29
Some final comments	5.30-5.34

APPENDICES

I—List of acknowledgments

II—The existing literature on revenue accounting

III—Measurement of revenue

IV—The examples used in the paper

V—Glossary

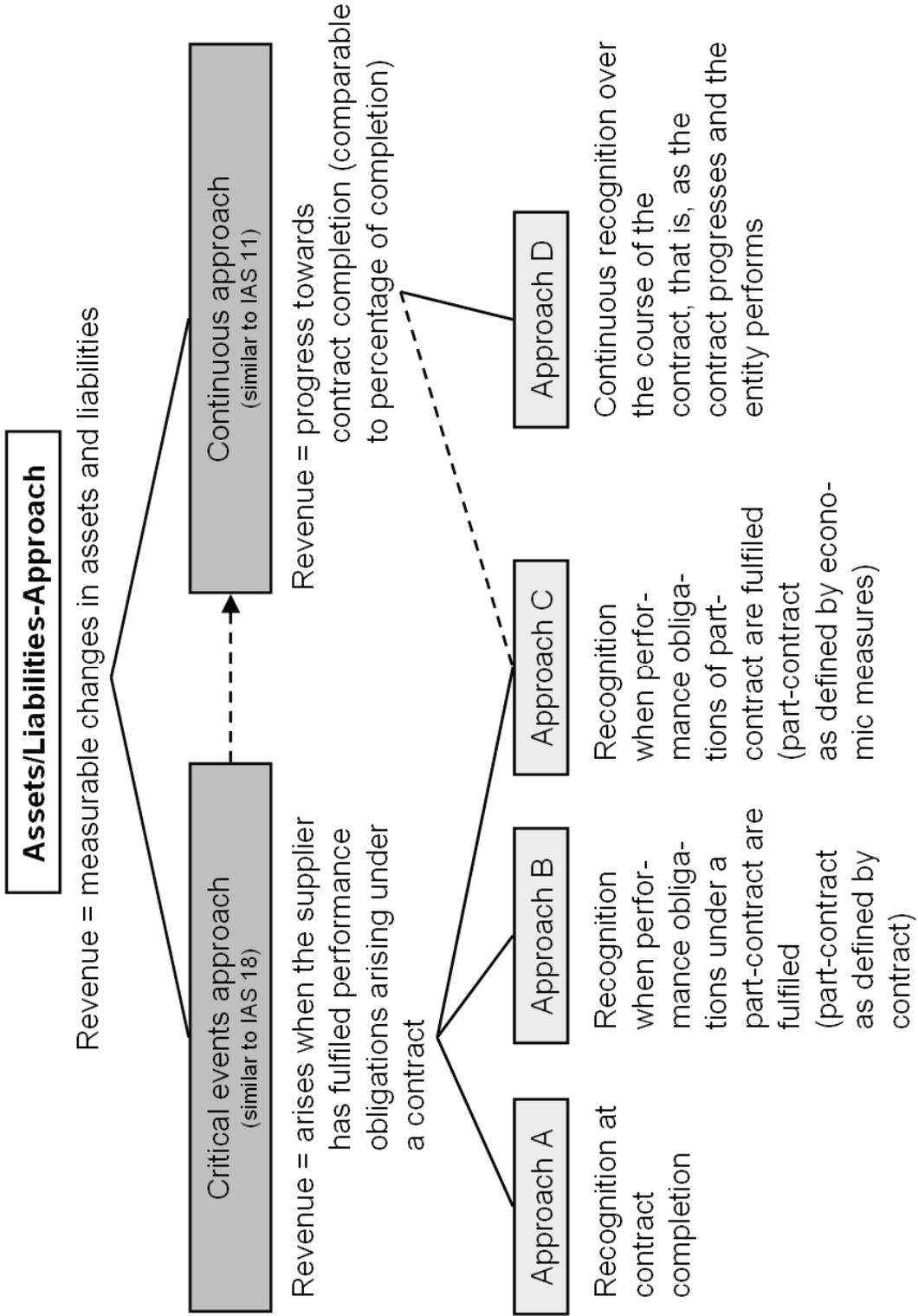
Summary

SUMMARY

- a Revenue issues have increasingly been the source of discussions amongst those applying, interpreting or enforcing accounting standards. This is partly due to the fact that new business models have evolved and new transaction types have emerged (such as multiple element arrangements) for which current IFRSs do not offer sufficient guidance. It is also because there are conceptual inconsistencies between IAS 18 *Revenue*, IAS 11 *Construction Contracts* and the IASB's *Framework for the Preparation and Presentation of Financial Statements*. The result is that different practices have been adopted and inconsistencies and uncertainties have arisen.
- b Yet revenue—by which we mean the top-line of the income statement—is a very important number for users; one for which we need clear, consistent and comprehensive principle-based standards.
- c Against this background the International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB) decided in 2002 to start a joint project on revenue recognition and measurement. The objective of the project is to develop a comprehensive set of conceptually-based principles that will eliminate existing inconsistencies, fill voids that have emerged and provide guidance that will be useful in addressing issues that may arise in the future.
- d Recognising the need for Europe to get involved *now* if it is to participate effectively in the revenue debate, the DRSC and EFRAG decided to work together to prepare a paper that would stimulate debate within Europe and to encourage the development of European views on the subject. This paper is the result of that work. It examines revenue recognition from first principles, with the aim of establishing a framework within which to address in a consistent way the revenue issues that are arising and will arise in the future.
- e The existing conceptual frameworks of the IASB and FASB provide the basis both for the work being undertaken by the IASB and FASB in their joint project and for this paper. At the core of those frameworks—and therefore of this paper—is the so-called assets/liabilities approach.
- f The paper develops, through deduction and analysis, a working definition of revenue: revenue is the gross inflow of economic benefits that arises as an entity carries out activities pursuant to a contract with a customer (see Chapter 2).
- g Concluding that revenue should be recognised as soon as it arises and is measurable, the discussion in Chapters 3 and 4 then focuses on the question: when does revenue arise? The paper approaches this issue by considering some simple transactions and exploring, modifying and further exploring various views of revenue. Through this process, four possible views of revenue and approaches to revenue recognition are highlighted—Approaches A to D—and the paper analyses those approaches in detail.
- h It emerges through this work that there are two very different types of revenue recognition approach—the critical events approach and the continuous approach—and they are based on very different views of how revenue arises.

Revenue Recognition—A European Contribution

- i Under a critical events approach, revenue reflects fulfilment of all or just some of performance obligations entered into through a contract with a customer. Under such an approach, no revenue arises under a contract until a particular event or threshold in the contract (the critical event) has been reached; then all the revenue arises either on the critical event occurring or between that point and the end of the contract. IAS 18 is based largely on a critical event approach. Different critical events result in different critical event approaches. The critical event approach is explored in Chapter 3, and three particular approaches (Approaches A, B and C) are discussed in detail. All those approaches are based on the basic premise that revenue is what an entity gets when it has done something it promised to do for a customer—although they are based on different views as to what that ‘something’ should be.
- j The continuous approach (Approach D) takes a different route; revenue is something that arises as the supplier does something, not *once* it has done it. Under this approach revenue arises continuously over the course of the contract as the contract progresses and the supplier performs. As a result, rather than having to focus on critical events, the approach adopts the simpler approach of asking how far the contract has progressed. Various measures can be used to determine progress. The underlying principle is very similar to the percentage-of-completion method described in existing IAS 11.
- k The chart on the next page summarises the approaches covered by this paper. It shows the basic nature and major characteristics of the two types of approach and the four specific approaches explored in detail.
- l The paper’s discussion of the differences between and merits of the various approaches described will, the authors believe, provoke plenty of debate within Europe and elsewhere on this important issue—and provoking debate and encouraging Europe to develop views is what this paper is primarily about. However, for the record, the DRSC, having discussed the issues in detail and at length, has concluded that the continuous approach offers a solution for the accounting for multiple element arrangements as well as for the problem of conceptual inconsistencies among current standards and the Framework. For that reason it would propose in effect applying the ‘percentage-of-completion method’ generally, rather than limiting its application to long-term construction contracts. EFRAG and the CNC, on the other hand, have decided not to state a preference in this paper, although they do agree that a single approach needs to be applied to all transactions.
- m The authors would welcome comments on the discussion in this paper. An Invitation to Comment is set out in the next section of the paper.



INVITATION TO COMMENT

The authors are requesting comments on this paper by 10 December 2007. Comments will be most helpful if they indicate the specific paragraph or group of paragraphs to which they relate and if they explain the rationale underlying the comment being made.

Comments are invited on any aspect of the paper, although the questions below set out some specific issues on which the authors would particularly welcome views.

- Q1 It is stated in the discussion paper (paragraphs 1.4 - 1.10 and Appendix II) that there are weaknesses in the IASB's existing revenue recognition standards, IAS 11 and IAS 18. In particular, the standards do not address certain types of transaction (for example they say little about multiple-element arrangements), they are based on different principles (which leads to inconsistencies and uncertainties and makes it difficult to know how to use the standards to fill the gaps) and there are internal inconsistencies within IAS 18. The paper goes on to say that these gaps, inconsistencies and uncertainties are causing real practical problems. Do you think these comments about the existing standards are fair? (If you do not, could you please explain which comments you think are not fair and why.) Do you have any additional concerns about existing standards? (If you do, please could you explain them.)
- Q2 Paragraph 1.20 states that the objective of the paper is to develop a framework within which to address revenue recognition issues in a consistent way. Paragraph 1.26 explains further that the ultimate objective of the revenue recognition debate should be to develop a set of principles that can be applied to all kinds of industries and business. In other words, rather than have different, competing principles like we do now, we would have a single principle or a single set of principles that apply generally and can be used to address any future gaps in standards.
- (a) Do you believe this is an appropriate and realistic objective? (If you do not, please could you explain your reasoning and what you believe *is* an appropriate and realistic objective.)
- (b) Although the objective is to develop principles that can be applied to all kinds of industries and businesses, the paper does not explore sector-specific issues in any detail; the analysis and discussion is generic and not based on any particular sector. (For example, the paper's only reference to financial institutions is to note, in paragraph 1.26, that banks and insurers do not present a revenue number and to observe that it is outside the scope of the paper to consider whether such entities should present a revenue number and what such a number should represent were it to be provided.) Do you believe this approach is appropriate? If you do not, please could you explain which sector-specific issues the paper should explore and why you think that would improve the quality of the analysis.
- Q3 Chapter 2 of the paper discusses what revenue is. It does so by examining what the Framework says about revenue (paragraphs 2.5 - 2.13) and what other attributes revenue should have (paragraphs 2.14 - 2.33). It concludes that:
- (a) Revenue is a particular type of increase in assets or decrease in liabilities.

Invitation to Comment

- (b) Revenue is a gross notion. In other words, if an entity sells an item for €10, making a profit of €2, it will be the €10 rather than the €2 that will be recognised as revenue.
- (c) Revenue does not necessarily arise only from enforceable rights and obligations.
- (d) Revenue is some sort of measure of activity undertaken pursuant to a contract with a customer. Therefore, without a contract there can be no revenue. Furthermore, revenue will not arise simply from entering into the contract, because at that point there will have been no activity undertaken by the supplier pursuant to the contract.
- (e) Revenue does not necessarily involve an exchange.
- (f) Revenue is something that arises in the course of ordinary activities.
- (g) On the basis of the conclusions summarised above, a working definition of revenue is that revenue is the gross inflow of economic benefits that arises as an entity carries out activities pursuant to a contract with a customer.

Do you agree with these conclusions? (If you do not, please could you state which conclusion you do not agree with and explain your reasoning.) Do you believe that revenue has some additional attributes that should have been referred to? (If you do, please could you describe those additional attributes and explain your reasoning.)

- Q4 As mentioned in Q3(d), revenue is some sort of measure of activity undertaken pursuant to a contract with a customer. However, the paper's analysis is not conclusive as to exactly what "sort of measure of activity" revenue measures; it could for example be a measure of completion activity (in other words, a measure of the things the supplier has completed) or a measure of activity towards completion (in other words, a measure of the things the supplier has done under the contract). This issue arises again and again in the paper and is the main issue that separates the critical event approaches discussed in Chapter 3 from the continuous approaches discussed in Chapter 4. The authors believe that a very important test of any proposed accounting solution is whether it is the most useful approach from a user perspective. Which activities do you believe the revenue number should measure: completion, or activity towards completion? Or are there other alternatives that need to be considered? (Please give your reasons for the answer you have given.)
- Q5 Chapter 3 discusses when revenue arises and, in doing so, introduces various critical event approaches to revenue recognition and explores three of them (Approaches A, B and C) in detail.
- (a) Do you believe the discussion of Approaches A to C is fair and complete? For example, do you believe that one of the approaches has some additional benefits or weaknesses that have not been mentioned? Or that some of the weaknesses mentioned are not weaknesses? (If you do, please could you explain what you think is unfair and incomplete about the discussion, together with your reasoning.)

Revenue Recognition—A European Contribution

- (b) Do you believe there are any critical event approaches other than Approaches A to C that have merit and are worth exploring in greater detail? (If you do, please could you describe those approaches and explain why you think they are worth exploring further.)
- Q6 Chapter 4 continues the discussion of when revenue arises by introducing and exploring another type of approach to revenue recognition: the continuous approach (Approach D). Again, do you believe the discussion is fair and complete? (If you do not, please could you explain what you think is unfair and incomplete about the discussion, together with your reasoning.)
- Q7 The discussion in the paper is about concepts and principles—and not at this stage practicalities—and the paper uses a variety of simple examples to illustrate the various approaches and various conceptual discussion points. The examples are set out in Appendix IV. Do you believe there are other examples that would illustrate or highlight issues of concept or principle that are not so far identified in the paper? If you do, what are those examples and what new aspect of the debate is it that you think they illustrate or highlight?
- Q8 What are your views on the relative merits of the approaches discussed in the paper? Do you believe that one approach is preferable to the others and could—perhaps after some further development work—be applied satisfactorily in all circumstances? (Please explain your reasoning.)
- Q9 At various points in the paper the authors discuss the issue of perspective; from whose perspective or point of view (ie through whose eyes) should performance be assessed? The suppliers or the customers? For example:
- (a) the issue is first mentioned in paragraphs 3.36-3.39, where it is explained that one perspective is not necessarily better than the other, although one may be better suited (or even an inherent feature) of one particular approach, whilst another might be better suited or a feature of another approach;
- (b) the issue is also discussed in paragraphs 4.4(c), 4.5(b) and 5.7(c), where it is explained that critical event approaches generally (but not necessarily always) apply a customer perspective whilst continuous approaches tend to apply a supplier perspective.
- In your opinion is this discussion complete and sufficiently conclusive? If you think it is not, could you please explain what more you think should be said and why.
- Q10 Do you believe there are particular aspects of the revenue debate that have not been covered in this paper but are worthy of consideration. If you do, what are they and why do you believe they are worth exploring further?

DISCUSSION

CHAPTER 1—INTRODUCTION

Everyone knows what revenue is and when it arises. Or so it is often claimed. Yet, on closer inspection it becomes clear that, except in the simplest of transactions, that is not actually the case. This might not matter if the 'revenue number' was relatively unimportant; however, it is widely viewed by users as a very important input to their analysis. It would also be less of an issue were the application of the existing standards on revenue trouble-free, but that is also not the case: difficulties have arisen in recent years as business models have evolved and new transaction-types have emerged.

This needs to be addressed. Fundamental changes may not be needed but, if overarching principles that can be consistently applied in all circumstances are to be developed, some fundamental questions need to be asked.

The IASB and FASB are working on a discussion paper on revenue recognition. This paper is a European contribution to the debate.

Revenue is an important number

- 1.1 Revenue as the top-line of the income statement¹ is usually the largest single item in the financial statements in monetary terms. It is also very significant in terms of its information value for investors. Investment analysts, for example, consistently report that the 'revenue number' is one of the key inputs to their analysis and assessment of an entity's past performance as well as to their forecasts of the entity's future earnings capacity.
 - (a) For many businesses, the revenue figure is seen as a key measure of the level of economic activity. That is because it reflects the extent to which the business has been busy supplying goods or services to customers. Users can therefore compare the entity's current level of economic activity under a contract with a customer with past activity levels and with that of its competitors as part of their assessment of the business' performance. Such market share information, coupled with the analysts' own assessments about the sector's prospects and the entity's competitiveness, also provides the basis for their forecasts about the entity's future performance.
 - (b) The separate disclosure of revenue and of related expenses enables users to estimate current profit margin information and compare that with the margins the entity earned in earlier periods and with that of competitors. It also helps users to assess the sensitivity of operating profit to volume and price changes and, therefore, to draw conclusions about the quality of profits.
- 1.2 Revenue has to date been important for another reason: for most businesses, the point at which revenue has been recognised has been the earliest point of profit recognition under historical cost.

¹ The terminology used in the paper is explained more fully in paragraphs 1.23-1.25, but it is worth emphasising one point now: in the paper 'revenue' means the line (or subtotal) that appears at the top of the income statement and is sometimes referred to as 'turnover'.

Revenue Recognition—A European Contribution

- 1.3 Revenue recognition and measurement is therefore an important subject; one which entities need to address in a consistent manner. Clear, comprehensive, generally accepted revenue recognition and measurement principles are needed to ensure that consistency.

Weaknesses in the existing revenue standards

- 1.4 Bearing in mind the importance of the revenue number, it is very unfortunate that real difficulties are arising in applying existing accounting standards on the subject.
- 1.5 Currently the International Accounting Standards Board (IASB) has two main standards that address revenue: IAS 11 *Construction Contracts* and IAS 18 *Revenue*. However, the standards appear to be based on different principles:
- (a) IAS 11, which applies only to certain types of construction contract, is based on the principle that revenue arises and should be recognised as the work necessary to complete the contract is being performed; and
 - (b) IAS 18, although requiring a principle similar to IAS 11's to be applied to contracts for services, states that, for contracts for the sale of goods, revenue should be recognised when the goods have been sold, the amount of revenue can be measured reliably and it is probable that the economic benefits associated with the transaction will flow to the entity.

Having different principles creates problems for two reasons. Firstly, the standards do not address certain types of transactions—for example, they say little about so-called multiple-element arrangements—and it is difficult to know how to fill this gap when competing principles exist. Secondly, the borders between the standards are somewhat arbitrary, which means that almost identical transactions can be accounted for differently.²

- 1.6 Furthermore, a number of the examples in IAS 18, although supposedly illustrating the application of IAS 18's revenue recognition principle for sales of goods, appear to be inconsistent with that principle.
- 1.7 As a result, although the standards seem to work reasonably well for fairly simple types of transactions, they give either conflicting guidance or no guidance at all for more complex transactions. (Appendix II sets out a more detailed analysis of the existing requirements in IFRS for revenue recognition and measurement and the difficulties that are arising from them.)
- 1.8 Some companies have responded to this by looking to US GAAP for help. However, US GAAP on revenue recognition is set out in numerous narrowly-scoped pronouncements of varying authority that have been issued by several different bodies. The SEC has sought to help by issuing SAB No. 101 'Revenue Recognition in Financial Statements' (which has subsequently been replaced by SAB 104

² Recently the IFRIC issued a draft Interpretation (IFRIC *D21 Real Estate Sales*) which proposes to clarify IAS 11 and make it clear that, at least as far as real estate sales are involved, it should be applied only to contracts for construction services; sales should be accounted for in accordance with IAS 18. In the authors' view, if this is a correct interpretation that applies more widely than just to real estate sales, some of the inconsistencies between IAS 11 and IAS 18 referred to in this paper would be addressed but others would remain.

'Revenue Recognition'). However, although SAB 104 lays down some principles, there remain different views as to when revenue should be recognised. (Again, further details are provided in Appendix II.)

- 1.9 Those European entities not looking across the Atlantic for help have tended to try to develop approaches based on notions of 'earning' revenue, realisation, accruals/matching and prudence. However, when applied to some transactions those notions can sometimes point in opposite directions and can cause as much uncertainty as the existing revenue recognition requirements. This has in turn resulted in differences emerging on issues such as what revenue should represent and how financial statements should portray an entity's operating activities.
- 1.10 The result is that different practices have been adopted, and inconsistencies and uncertainties are arising.

The joint IASB and FASB project on revenue recognition

- 1.11 Faced with these concerns, the IASB and the financial reporting standard-setter in the US, the Financial Accounting Standards Board (FASB), decided to undertake a project on revenue. The objective of the project is to develop a comprehensive set of conceptually-based principles for revenue recognition and measurement that will:
- (a) eliminate the inconsistencies in the existing authoritative literature,
 - (b) fill voids that have emerged in revenue accounting guidance in recent years, and
 - (c) provide conceptual guidance that will be useful in addressing issues that may arise in the future.

This, the two Boards hope, will result in the inconsistencies in existing practice being eliminated and practice being improved generally.

- 1.12 In theory there are a number of different ways the two Boards could have decided to tackle the problem. At one extreme they could attempt to resolve the problems by making a series of ad hoc changes to the existing standards without carrying out a fundamental rethink. For example:
- (a) it ought to be possible to address some of the concerns about the arbitrariness of the boundaries between the standards by making amendments to the definition of construction contracts and distinguishing between different types of contracts for services; and
 - (b) they could develop material to address the transactions that are not dealt with comprehensively in the existing material.
- 1.13 Such an approach is attractive because many commentators seem to be of the view that the existing revenue literature works for the vast majority of transactions. In other words, if a change needs to be made, it does not need to be a big one, so it is not necessary to ask fundamental questions about revenue; instead it is necessary only to ask what 'add-ons' and exceptions need to be made to the existing material.

Revenue Recognition—A European Contribution

- 1.14 However, such an approach would mean that standards would still be based on different revenue accounting principles. That in turn would mean there would still be boundaries between principles that will be problematical and it would still be difficult to extrapolate the existing material to address new types of transactions that will emerge in the years ahead. There would also continue to be different views of what revenue is and of how financial statements should portray an entity's revenue-related activities. In other words, such an approach would provide only temporary relief.
- 1.15 The IASB and FASB have therefore taken the view that a fundamental rethink is necessary. This does not necessarily imply that there will be a fundamental change to existing practice; indeed, if the existing literature on revenue really does work for the vast majority of transactions, it is likely that the changes resulting from the fundamental rethink will not be major. However, by considering from first principles exactly why we do the things we do and what the alternatives are, it ought to be possible to develop a comprehensive set of coherent conceptually-based principles for revenue recognition and measurement.
- 1.16 The current timetable for the joint IASB/FASB project envisages a Discussion Paper being issued in the first half of 2008. That probably means an exposure draft of a proposed standard will not be issued before 2009, and a final standard will not be issued before 2010.

Why this paper has been prepared

- 1.17 Over the last few years it has become clear that Europe needs to participate actively and from an early stage in the global standard-setting process to ensure that European views and any special European circumstances are understood and taken fully into account in proposals for new standards. That is especially important when fundamental issues like revenue are involved.
- 1.18 Furthermore, if Europe is to participate actively and from an early stage in the revenue accounting debate, it needs to start thinking about the issues *now*. And, if it thinks it has some ideas that are useful contributions to the debate, it needs to communicate them to the two Boards as soon as possible.
- 1.19 For those reasons, the Deutsches Rechnungslegungs Standards Committee (DRSC, or German standard-setter) and the Technical Expert Group of European Financial Reporting Advisory Group (EFRAG) decided to work together—with the help of others³—to prepare a paper as part of Europe's initial contribution to the debate. The primary objective of the paper is to stimulate debate within Europe and thereby to encourage the development of European views on this important subject.
- 1.20 The paper examines revenue *recognition* from first principles, with the aim of developing a framework within which to address in a consistent way the revenue recognition issues that are arising and will arise in the future. It does that by first asking what revenue is (Chapter 2), then asking when it arises (Chapters 3 and 4)

³ Appendix I contains details of those the DRSC and EFRAG would like to thank for their contributions to the paper.

- 1.21 The paper does not discuss revenue *measurement* to any significant extent. There is a short appendix (Appendix III) that an issue that *could* be described as a measurement issue; however it is probably best described as an allocation issue. The issue is how to allocate the amount of consideration specified in the contract between part-contracts when the revenue recognition approach adopted involves disaggregation.
- 1.22 The authors recognise that ideally this paper would have addressed both the recognition and the measurement of revenue. However, they did not think they could do the subject of revenue measurement justice without addressing measurement in its entirety, which would have widened the scope of this paper considerably. The authors know that some would argue that a paper that deals with revenue recognition but not revenue measurement is flawed. However, they do not agree. In their view, whilst it may not be possible to deal satisfactorily with the subject of profit recognition without considering measurement, this paper focuses on the top line of the income statement rather than on profit—a difference that is discussed in paragraph 1.27—and the authors believe that in that context recognition can be discussed separately from measurement.

Terminology used in the paper

- 1.23 When people talk about the income statement⁴, they use terms like ‘income’, ‘revenue’, ‘sales’, ‘turnover’, ‘gains’, ‘other gains’, ‘profits’, ‘expenses’, ‘losses’ ‘costs’ and ‘other losses’. Some of these terms are interchangeable, and some are used differently by different people. It is therefore important that this paper is clear about the terminology it uses and it applies that terminology consistently. There is a glossary of terms at the end of the paper but the terminology we think you need to understand from the outset is as follows:
- (a) *Revenue*—The term ‘revenue’ is used in the paper to refer to the top line of the income statement. This line has sometimes been called ‘turnover’ or ‘sales’ in the past, although whether those labels will be appropriate in the future will depend on the conclusions reached about what ‘revenue’ represents.⁵
- (b) *Other income statement credit items*—All the other credits that are recognised in the income statement are referred to in the paper as ‘other income statement credits’. For example, if it is decided that the sale of a fixed asset does not give rise to revenue, either the sales proceeds or the profit on the sale (depending on whether the item is being presented gross or net in the income statement—an issue that is not relevant to this paper) will be an ‘other income statement credit’ item. Similarly, if increases in the value of a particular asset are being

⁴ In March 2006, the IASB issued an exposure draft of proposed Amendments to IAS 1 *Presentation of Financial Statements: A Revised Presentation*. That ED proposes renaming the income statement and it discusses whether there should be one performance statement or two. The paper refers throughout to the performance statement or statements (or whatever it is that it is or they are to be called) as the ‘income statement’. This has been done merely for simplicity and not to make some sort of comment on the issues raised in the ED.

⁵ Under some performance reporting presentation models there may be several lines at the top of the performance statement that when aggregated represent turnover. The paper’s references to ‘the top line’ should be read to include these subtotals.

Revenue Recognition—A European Contribution

recognised in the income statement but it is decided that they are not revenue, they will be 'other income statement credit' items.

- (c) *Expenses*—This term is used to refer to all the debits recognised in the income statement. For presentation purposes it can be useful to differentiate between types of expense, but that issue is not relevant to this paper.

1.24 Under the terminology described in the previous paragraph, 'revenue', 'other income statement credit items' and 'expenses' will be the only items that appear in the income statement. However, when talking about a particular item, transaction or other event, the paper may use the terms 'profit' or 'loss'—by which it means the revenue and other income statement credit items arising on the item, transaction or event, less the related expenses.

1.25 It follows from this that the discussion in the paper is primarily about which items to recognise when and at what amount *in the top line of the income statement*.

Scope of the paper

1.26 The ultimate objective of the revenue debate must be to develop a set of principles that can be applied to all kinds of industries and businesses. However, some types of entity—for example, banks and insurers—currently do not present a top-line of the income statement that represents 'turnover' or 'sales' and it is outside the scope of the paper to consider whether such entities *should* present a revenue number and what such a number should represent were it to be provided.

1.27 As has already been explained, the focus of this paper is on what items should be recognised on the top-line of the income statement and when those items should be recognised. In other words, the paper does not focus much on the *measurement* of revenue, and it does not focus at all on profit recognition. Some believe that this is the wrong approach to adopt; in their view the revenue debate should be broken down into a debate about profit recognition and measurement and a debate about how best to present those recognised profits in the income statement.

- (a) The authors believe that profit recognition is a much broader subject than revenue recognition and inevitably requires conclusions to be reached on many aspects of the much wider measurement debate. Therefore, to ensure that the project does not become unmanageably large, they have chosen to focus on the narrower subject of revenue recognition.
- (b) This means that some of the issues that would be considered in a profit recognition project will not be addressed, and that some of the analysis will start from a different point, but the authors see no reason to believe that the approach chosen is flawed.

CHAPTER 2—WHAT IS REVENUE?

In order to develop some principles that will enable us to determine when revenue arises, we need first to decide what revenue is. That means deriving a definition of revenue from the Framework. The analysis in this chapter seeks to do that, and it concludes that revenue is "the gross inflow of economic benefits that arises as an entity carries out activities pursuant to a contract with a customer."

Concepts underlying the discussion in this paper

- 2.1 The authors believe that, if this paper is to influence the joint IASB/FASB project on revenue accounting, it needs to adopt the conceptual basis that the IASB and FASB are adopting in their project.
- 2.2 The two Boards have made it clear that the conceptual basis for their project will be their conceptual frameworks. Although those frameworks are not identical, they both adopt what is commonly referred to as an 'asset/liability approach'.⁶ In other words, both frameworks define the items that are recognised in the balance sheet (assets and liabilities), then define the items that are recognised in the income statement (what we are calling revenue, other income statement credit items, and expenses) in terms of changes in assets and liabilities.⁷ Therefore, this paper also adopts an asset/liability approach.⁸
- 2.3 Some think it is odd to start a discussion about revenue by talking about assets and liabilities. They argue that revenue accounting is all about an earnings process (and perhaps also the notions of 'matching' and 'realisation') and that, if we are to develop appropriate revenue recognition principles, we should adopt some sort of income and expenses approach. In their view, if we start by focusing on assets and liabilities, our work will be doomed to failure from the outset.
- 2.4 The authors do not accept this argument.
 - (a) The asset/liability approach is adopted in all the major conceptual frameworks that have been developed by standard-setters around the world over the last thirty years⁹ and those frameworks have provided the basis for some very significant improvements in financial reporting over that time. Admittedly applying the approach to income statement issues can result in some awkwardness of language, but there seems no reason to believe such an approach is "doomed to failure".

⁶ Some commentators think 'asset primacy approach' is a more accurate description because, under the approach, everything is defined in terms of assets, claims on assets, and changes in assets and in claims on assets.

⁷ The two Boards are currently revising their frameworks in order to try to converge them. It is widely expected that this converged framework will also adopt an asset/liability approach.

⁸ All references hereafter to the Framework are references to the existing version of the IASB's *Framework for the Preparation and Presentation of Financial Statements*.

⁹ Including, for example, the Frameworks developed by the IASC and the standard-setters in Australia, Canada, New Zealand, South Africa, the UK, and the USA.

Revenue Recognition—A European Contribution

- (b) In any event, adopting the asset/liability approach does not mean that the earnings process has to be ignored. For example, at the centre of the earnings process of a manufacturing entity is the production, then disposal of an asset in exchange for another asset (a receivable). Looking at which asset the entity has is how IAS 18 currently determines whether there has been a sale and therefore whether revenue has arisen.

What does the Framework tell us about revenue?

What does the Framework say?

- 2.5 Paragraph 47 of the Framework (FW.47) explains that “financial statements portray the financial effects of transactions and other events by grouping them into broad classes according to their economic characteristics. These broad classes are termed the elements of financial statements.” It then states that the elements of financial statements are assets, liabilities, equity, income and expenses.
- 2.6 FW.70(a) defines income as “increases in economic benefits during the accounting period in the form of inflows or enhancements of assets or decreases in liabilities that result in increases in equity, other than those relating to contributions from equity participants.”
- 2.7 FW.74 goes on to explain that “the definition of income encompasses both revenue and gains. Revenue arises in the course of the ordinary activities of an entity and is referred to by a variety of different names including sales, fees, interest, dividends, royalties and rent.”

What does the Framework mean?

- 2.8 Taken together, these paragraphs tell us that revenue is a particular type of income. In other words:

Revenue is a particular type of increase in economic benefits that arises during the accounting period in the course of ordinary activities in the form of inflows or enhancements of assets or decreases in liabilities and results in an increase in equity, other than those increases or decreases that relate to contributions from equity participants.

- 2.9 This initial 'working definition' can be simplified in a number of respects. First of all, although the definition includes the words “during the accounting period”, those words seem to relate more to *when* income arises and/or should be recognised (which is a subject discussed in the next chapter) rather than *what* income is. The words can therefore be omitted from the definition.

Revenue is a particular type of increase in economic benefits that arises ~~during the accounting period~~ in the course of ordinary activities ...

Chapter 2—What is revenue?

- 2.10 The words "other than those increases or decreases that relate to contributions from equity participants" have been included to ensure that capital contributions are not treated as income. However, as long as we eventually clarify what we mean by "a particular type of increase in economic benefits", it should not be necessary to retain the words.

Revenue is a particular type of increase in economic benefits that arises in the course of ordinary activities in the form of inflows or enhancements of assets or decreases in liabilities and results in an increase in equity, ~~other than those increases or decreases that relate to contributions from equity participants.~~

- 2.11 The reference to increases in economic benefits in the form of inflows or enhancements of assets or decreases in liabilities reminds us that an asset/liability approach is being applied—so increases in economic benefits that do not have an impact on assets or liabilities are not revenue. It is also possible that the reference is intended to distinguish income from other types of increase in assets or decrease in liabilities, such as the settlement of a loan or the purchase of an asset. These are things we will need to bear in mind as we refine our definition.
- 2.12 The authors find the reference to "an increase in equity" a bit confusing because it could be taken to mean that revenue can only arise from a profit-making transaction. Currently of course, revenue also arises from loss-making and break-even transactions. In effect, revenue is some sort of gross notion.¹⁰ Again, this something we should bear in mind as we refine our definition.

- 2.13 So, to summarise where we are up to, currently our working definition is:

Revenue is a particular type of increase in economic benefits that arises in the course of ordinary activities in the form of inflows or enhancements of assets or decreases in liabilities and results in an increase in equity.

And we have concluded that we need to incorporate in that working definition something that distinguishes income from, say, the purchase of an asset and the idea that revenue is some sort of gross notion, whilst at the same time making it clear that there does not need to be a net increase in equity.

What other attributes should revenue have?

Should revenue remain a gross notion?

- 2.14 Before we go any further, it is perhaps worth mentioning that some question whether revenue should remain a gross notion. The authors believe that, in matters such as this, the key test is what is most useful to users of financial statements, and there is no doubt that they find a gross revenue number useful. This is particularly true as regards assessments about future cash flows. Selling prices and buying prices do not always move together—the entry of a new competitor, for example, may reduce selling prices but have no effect on costs. It is therefore reasonable to suppose that sophisticated users will attempt to predict future activity levels and future selling prices

¹⁰ Some commentators argue that whether revenue is a gross notion is not about what revenue is, but rather about either measurement (how much revenue has arisen) or presentation (how can the transaction most usefully be represented in the financial statements). That might be right; but the authors nevertheless want to make it clear from the outset that it is a gross notion.

Revenue Recognition—A European Contribution

(to forecast future revenue) and, separately, the cost of obtaining those revenues (or, equivalently, the margin that will be achieved on those revenues). Users' predictions are likely to be better if they are based on separate information on sales (ie revenue) and costs of sales than if they are based only on a net number such as gross profit.

- 2.15 For that reason, the paper assumes that revenue will continue to be some sort of gross number.

Has revenue to be based on enforceable rights and obligations?

- 2.16 Some argue that, as we are applying an asset/liability approach and are therefore focusing on increases in assets and decreases in liabilities, we need to focus on enforceable contractual rights and enforceable obligations.
- 2.17 However, not all assets and liabilities are based on enforceable contractual rights or obligations. For example, liabilities that are based on constructive obligations might not be enforceable. Similarly, inventory and fixed assets involve enforceable rights—because the entity that has them has exclusive access to the benefits if any that will be derived from them and can enforce that exclusive right of access—but those rights do not arise from a contract.
- 2.18 It is therefore not correct to argue that the asset/liability approach *requires* us to focus on enforceable contractual rights and obligations. That does not mean though that it would necessarily be wrong to focus on such rights and obligations. This issue underlies much of the discussion in the next two chapters on when does revenue arise.

Revenue is some sort of measure of activity undertaken pursuant to a contract with a customer

- 2.19 We explained at the beginning of the paper that, for many businesses, the revenue figure is currently a key measure of the level of economic activity undertaken by the reporting entity in supplying goods and services to customers. This is an important number because ultimately it is transactions with third-parties that enable the value that the entity adds to be realised. An entity that is extremely busy but has no customers is a very different entity to one that works hard for its customers. Users compare the entity's current level of activity in supplying goods and services to customers with past activity levels and with that of its competitors as part of their assessment of the entity's performance. Such market share information, coupled with the users' own assessments about the sector's prospects and the entity's competitiveness also provide the basis for their forecasts about the entity's future performance.
- 2.20 In other words, revenue is currently some sort of measure of the level of activity undertaken pursuant to a contract with a customer.¹¹ There are however other possibilities. For example, revenue could be some sort of measure of *all* economic activity undertaken, including manufacturing for inventory and constructing an asset for own use. This might seem a rather odd idea, but consider the following example:

¹¹ The term 'contract' is used throughout the paper to refer to an agreement between two parties. It does not need to be a written agreement to be a contract. Thus, even when one party goes into a sweet shop and buys a sweet, there is a contract between the buyer and supplier.

Chapter 2—What is revenue?

The Boat Builder

Assume a company makes boats. The boats are large and complex to make and the boatbuilder company makes only a few boats each year. Usually it makes the boats to order (ie under the terms of a customer contract) and, because its boats are very attractive, it generally has a very full order book. However, occasionally it is short of orders and in those circumstances it makes the most popular designs of boat for inventory.

In 2005 it did not need to make any boats for inventory; it worked at full capacity making boats to order.

In 2006 those of its customers that buy the most popular designs decided to delay placing their orders, comfortable in the knowledge that the boat builder would build the boats they want anyway, meaning they could buy the boats from stock instead. That meant much of the company's time was spent building for inventory.

In 2007, the boats built for stock were sold and customers went back to placing orders in advance for boats.

In this example, if we say that revenue is a measure of the level of economic activity undertaken pursuant to a contract with a customer, the boat builder's revenue will have fallen very significantly in 2006, and increased very significantly in 2007—even though its boatbuilding activity has been constant.

- 2.21 Expressed more generally, in industries (and at times) in which the placing of an advance order seems not to be a particularly significant event, basing revenue only on the activities undertaken pursuant to a contract can produce revenue figures that are not straightforward to interpret. However:
- (a) If one understands that revenue is only a measure of the level of activity undertaken pursuant to contracts with customers, one should not find it too difficult to interpret a wildly fluctuating revenue number accompanied by equal but opposite fluctuations in the levels of inventory and work-in-progress, informative order book disclosures and a good management commentary. Such an approach seems preferable to expanding the revenue number to include building for inventory and own use.
 - (b) Although in some industries and at some times the placing of an advance order may seem not to be "a particularly significant event", the reality is that orders from customers (whether or not they are in advance) are the lifeblood of a profit-oriented entity.
 - (c) If revenue is such an important number, it ought to be a number that the reporting entity does not have the ability to vary at will. Manufacturing for inventory or own-use is a something that can be varied at will because there is no third party involved. On the other hand, activity carried out under the terms of a contract with a customer is not something that the reporting entity can vary at will to the same extent because there is a counterparty ensuring that the level of activity is in accordance with the contractual terms.

Revenue Recognition—A European Contribution

2.22 For these reasons, the authors have concluded that revenue should continue to be something that arises from activity undertaken pursuant to a contract with a customer.¹² Thus, no revenue will arise before the contract is entered into or on signing the contract—because at that point there has been no activity undertaken pursuant to the contract—and all the revenue arising on a transaction will be recognised by the time the contract has been completed.¹³

2.23 Thus, our working definition of revenue becomes:

Revenue is a particular type of increase in economic benefits that arises in the course of ordinary activities is in the form of inflows or enhancements of assets or decreases in liabilities, arises from activities carried out pursuant to a contract with a customer and results in an increase in equity. It does not include those increases in economic benefits that do not arise in the course of ordinary activities.

2.24 Back in paragraph 2.13 we noted that we still needed to incorporate in our definition something that distinguishes income from, say, the purchase of an asset and the idea that revenue is some sort of gross notion, whilst at the same time making it clear that there does not need to be a net increase in equity. The introduction of the notion that revenue arises from activities carried out pursuant to a contract with a customer enables us to do that.

Revenue is a particular type of increase in the gross inflow of economic benefits that is in the form of inflows or enhancements of assets or decreases in liabilities, arises as an entity carries out from activities carried out pursuant to a contract with a customer and results in an increase in equity. It does not include those increases in economic benefits inflows that do not arise in the course of ordinary activities.

What sort of activity pursuant to a contract with a customer should be measured?

2.25 Having concluded that revenue should be a measure of activity undertaken pursuant to contracts with customers, there is still the issue of whether it should measure contract completion activity or some other form of activity undertaken pursuant to a contract with a customer. For example, an entity that enters into a contract with a customer to make and deliver to that customer a large item of machinery and then works hard all year making that machine but does not deliver it until after the year-end has been very active—but has not completed any contracts. Should its activity, undertaken in order to put it in a position to complete the contract, be reflected in revenue before the contract has been completed? In other words, should revenue be a measure of contract fulfilment or of any activity undertaken in order to put the entity in a position to complete the contract (ie performance towards contract fulfilment)?

2.26 This is the issue on which existing standards are not consistent. IAS 11 takes the view that revenue is something that arises from performance towards contract fulfilment; and IAS 18 takes the view that revenue is something that arises on contract fulfilment.

¹² For the avoidance of doubt, the term 'customer' is used in the paper to mean 'counterparty'.

¹³ Some believe that profit, and perhaps even revenue, can arise at the point at which the contract is entered into even though at that point the supplier might not have carried out any activities pursuant to the agreement. This paper expresses no view on whether profits can arise at that point, but by describing revenue as something that arises from activities carried out pursuant to a contract with a customer it does conclude that revenue does not arise simply because a contract has been entered into.

Chapter 2—What is revenue?

2.27 The authors have decided not to try to answer this question at this point in the paper—but it is a subject they return to in the next two chapters.

Does revenue involve an exchange?

2.28 Some argue that revenue can arise only when there has been an exchange between two parties.

2.29 Part of the problem with this is that different people have different views as to what an exchange is or which exchange is the one that generates revenue. For example, some argue that, as a contract will always involve an exchange of promises, requiring there to be an exchange adds little to the conclusion the paper has already reached that there cannot be revenue unless there is a contract. On the other hand, some argue that the exchange occurs when one entity supplies services or goods to another party and in return or as a result receives a right to consideration. Although that sounds plausible, it also begs the question "And when will that be?" The authors do not think that progress will be made if we answer one question—what is revenue—by introducing notions that ask additional questions of their own. That is not to say that, if it emerges from our subsequent analysis that exchange has a role to play (see paragraph 3.62 for example), we will ignore that fact; merely that we will not start off by saying that revenue arises only if there has been an exchange.

What does "in the course of ordinary activities" mean?

2.30 As was mentioned in paragraph 2.7, FW.74 explains that "the definition of income encompasses both revenue and gains. Revenue arises in the course of the ordinary activities of an entity and is referred to by a variety of different names including sales, fees, interest, dividends, royalties and rent." Some believe that this reference to "in the course of the ordinary activities of an entity" is intended to distinguish revenue from the proceeds that arise when an entity that hardly ever sells any of its fixed assets sells some of its land and buildings. Some believe that it goes further than that and attempts to differentiate between core activities and incidental activities. It is perhaps noteworthy that IAS 18.7 makes the same point as FW.74, then goes on to say rather vaguely that an entity's ordinary activities might encompass inflows resulting from the sale of goods, the rendering of services and the use by others of entity assets yielding interest, royalties and dividends.

2.31 It is difficult to generalise about sales of fixed assets (and incidental activities). For many entities fixed asset disposals may be an incidental activity—and may even be something that does not happen "in the course of ordinary activities"—but for a car rental company one could well imagine that selling the cars it rents is an essential part of its business model. As a result, users need information about the car selling activities of a car rental company that they do not need for other types of entity. What is an 'operating activity' and what is an 'incidental activity' will depend on the circumstances of the respective industry and business.

2.32 Frequency of occurrence and materiality are often factors that also need to be taken into account because, if an activity occurs frequently and is expected to continue to occur frequently, users will want to use information about the activity in the past to make assessments about how the activity might develop in the future. However, if an activity does not occur frequently, users will usually want a different set of information—information about timing and likely cash flow impact—if they are to make

Revenue Recognition—A European Contribution

assessments about the future. For these reasons, the predictive value of revenue as regards the entity's ability to generate cash flows in the future would probably be enhanced were it to take no account of activities that are not expected to occur frequently in the future.

- 2.33 If we are to progress any further with this issue, we would need to develop some robust definitions. However, the authors believe this is unnecessary because they can see no reason to believe that the recognition principles involved will vary depending on whether the focus is on just core or ordinary activities. For that reason, they believe the reference in the working definition to ordinary activities can be omitted for the purposes of the paper's discussion of revenue recognition.

~~... It does not include those inflows that do not arise in the course of ordinary activities.~~

A definition of revenue

- 2.34 To conclude, in this chapter we extracted material from the Framework on what revenue is and, through analysis and by deduction, ended up with the following definition:

Revenue is the gross inflow of economic benefits that arises as an entity carries out activities pursuant to a contract with a customer.

CHAPTER 3—WHEN DOES REVENUE ARISE? (PART 1—CRITICAL EVENT APPROACHES)

Revenue should be recognised when it arises. There are however different views as to when that is. This chapter and the next explore four views in detail, and develop four competing revenue recognition approaches.

What does the Framework say about when revenue arises?

- 3.1 FW.92 states that income is recognised in the income statement when it arises and can be measured reliably. The Framework goes on:

“92 ... This means, in effect, that recognition of income occurs simultaneously with the recognition of increases in assets or decreases in liabilities (for example, the net increase in assets arising on a sale of goods or services or the decrease in liabilities arising from the waiver of a debt payable).

93 The procedures normally adopted in practice for recognising income, for example, the requirement that revenue should be earned, are applications of the recognition criteria in this *Framework*. Such procedures are generally directed at restricting the recognition as income to those items that can be measured reliably and have a sufficient degree of certainty.”

- 3.2 We could therefore focus on increases in assets and decreases in liabilities; asking which sorts of increases and decreases represent gross inflows of economic benefits that arise as an entity carries out activities pursuant to a contract with a customer and when do those sorts of increases and decreases arise. That would, in theory at least, enable us to develop a revenue recognition principle that focuses on particular types of balance sheet changes.
- 3.3 However, the authors know from their own experience in trying to move the discussion on that such an approach can degenerate into a discussion that seems to some to be far-removed from 'the real world'. Therefore instead the discussion below starts by trying to derive a revenue recognition principle from the way that many people think of revenue in a simple straightforward transaction. It then discusses ways in which that principle might be modified and what the implications of those modifications might be. Eventually, although we identify a number of different views of when revenue arises, we explore, compare and contrast four of them (known as Approaches A to D) in detail. All those approaches are asset/liability approaches.
- 3.4 The discussion uses the following example transactions:

The Chair

A customer buys an already-made chair from the supplier, and takes it home in his car.

The Washing Machine

A customer with a washing machine enters into a contract with a separate supplier (the plumber) that requires the supplier to connect the washing machine to the customer's existing plumbing and do all other things that are necessary to make the washing machine work.

The Cleaner

A customer enters into a contract that requires the supplier (the cleaner) to visit his office every work day evening for a year and carry out on each of those visits an identical set of cleaning tasks.

The Bridge

A customer enters into a contract with the supplier (a construction company) that requires the supplier to build a bridge to the customer's design and specification. The contract envisages that the bridge will take three years to complete.

The Computer

A customer orders from the supplier a particular specification of computer along with a specified package of off-the-shelf software. The supplier is required to supply and deliver the computer with the software already loaded, connect up all the wires and make sure everything works, and provide the customer with ten hours of tuition on how best to use the computer and its software.

NB. In paragraph 1.5 we referred briefly to multiple-element arrangements. It is assumed that this example is a multiple-element transaction that has at least two components: the supply, delivery and set-up of the computer and software; and the tuition.¹⁴

Approach A—The complete contract fulfilment approach

The approach explained

- 3.5 This paper starts by stating that some argue that "everyone knows what revenue is and when it arises". What it meant by this was that many would say that revenue is something an entity gets for doing what it has promised to do for a customer. What this means exactly is something that will be explored in this chapter, but one possibility is that it means that revenue arises only when the supplier has fulfilled all its performance obligations in full. In this paper this approach is known as a complete contract fulfilment approach.
- 3.6 For example, consider a simple transaction in which the supplier agrees to carry out a single, relatively simple act of performance for the customer that will not take long to

¹⁴ The authors have not so far in this paper defined what they mean by a 'multiple-element arrangement', nor have they attempted to develop a methodology for identifying the elements in a multiple-element arrangement. There are differing views on both issues. However, few would disagree that there are, at the very least, two elements in the transaction described: the tuition and the rest of the contract.

Chapter 3—When does revenue arise? (Part 1—Critical event approaches)

do (the performance obligation) and the customer agrees to pay the supplier an amount of money when the supplier has met its performance obligation. If revenue arises only on complete contract fulfilment, no revenue will arise until the supplier has met the performance obligation and at that point all the revenue relating to the transaction arises.

- 3.7 In terms of assets and liabilities, what is happening in this transaction is that, when—and because—the supplier has met its performance obligation, it acquires a right to consideration.¹⁵ That right to consideration is a new asset, so the supplier's performance under the contract (ie the activity it has undertaken pursuant to a contract with a customer) has given rise to an increase in assets—and therefore to revenue.
- 3.8 This would suggest a draft revenue recognition principle along the following lines:

Revenue arises when the supplier fulfils all the performance obligations arising under a contract with a customer.

The approach applied to our five examples

- 3.9 Approach A can be illustrated by considering the five example transactions summarised in paragraph 3.4 above.
- (a) *The Chair*—In this example, the supplier hands the chair to the customer and by doing so fulfils all its performance obligations. Therefore, as soon as it has handed over the chair, the supplier gets a right to consideration and revenue arises.¹⁶
 - (b) *The Washing Machine*—In this example, the supplier (ie the plumber) fulfils all its performance obligations only when it has connected the washing machine and ensured that it is working. At that point, it gets a right to consideration for the work done and revenue arises.
 - (c) *The Cleaner*—Although the cleaning contract could be described as involving 365 identical daily contracts, the fact is that it is actually a single contract and that is what matters under Approach A. The supplier (ie the cleaner) fulfils all its performance obligations only when it has carried out its cleaning duties on each and every day of the year. Until then, no revenue arises and, at that point, the supplier gets a right to consideration for the work done and revenue arises.
 - (d) *The Bridge*—The supplier (ie the construction company) will not fulfil all its obligations under the contract until the bridge has been completed. Therefore, under Approach A no revenue at all would arise until the supplier has completed

¹⁵ The references in the paper to a right to consideration are references to an enforceable and unconditional right. A right to consideration is not the same as a right to reimbursement, nor is it necessarily the same as a construction company's right to be paid stage payments as its construction work progresses.

¹⁶ This is a simplified analysis of the transaction, as are the other analyses. In many cases, for example, there would be a customer acceptance stage. Customer acceptance is discussed later in the paper. Furthermore, warranty terms and periods are not discussed here although they may impact on when revenue arises. Finally, IAS 18 uses the phrase 'the transfer of all significant risks and rewards of ownership' rather than 'hands the chair to the customer'. Although this can be important in some transactions, we have assumed that it is not important in the examples discussed in this summary.

Revenue Recognition—A European Contribution

the bridge—then a right to consideration (and revenue) for the whole amount of the consideration would arise.

- (e) *The Computer*—The fact that this transaction is a multiple-element arrangement is irrelevant under Approach A; all that matters is when the supplier has done everything it is contracted to do (in other words, when the computer with software loaded has been supplied, connected and made to work and all the tuition has been provided). Until that happens, there is no revenue and, as soon as it has happened, a right to consideration (and revenue) for the whole amount of the consideration will arise.

Discussion

- 3.10 We have started with the complete contract fulfilment approach because it reflects what many people believe about revenue—it is something you get when you have done what you promised to do. The approach seems to work well in the case of the Chair and Washing Machine transactions. However, some find the way the approach treats the Cleaner and the Bridge transactions less satisfactory, because no revenue will arise in the case of those transactions even though, in the Cleaner example, the Cleaner might have cleaned the office to the customer’s satisfaction many times already and, in the Bridge example, the supplier might have nearly finished constructing the bridge.
- 3.11 The authors believe the position is less clear cut in the case of the multiple-element arrangement example. Some would see it in a similar way to the Cleaner and Bridge examples—in other words, not well served by Approach A—and some would probably see it as being more like the Chair and Washing Machine examples.
- 3.12 This feeling that Approach A “works well” for the Chair and Washing Machine examples and is “less satisfactory” for the Cleaner and Bridge examples in part reflects the extent to which the approach mirrors existing IFRS. Approach A results in the Chair and Washing Machine transactions being accounted for in the way they would be accounted for under existing IFRS (and IAS 18); but it does not result in the Cleaner and Bridge transactions being accounted for in the way they would be accounted for under existing IFRS.
- 3.13 The feeling is also a reflection of what people want the revenue number to show. Approach A focuses on complete contract fulfilment and therefore results in revenue being a measure of complete contract fulfilment. If you want revenue to be a measure of, for example, performance pursuant to a contract, Approach A will be satisfactory only when contract completion is almost instantaneous and will be less satisfactory when the contract takes a longer period of time to complete.
- 3.14 Although we have so far expressed the thinking underlying Approach A in terms of contract completion—revenue arises only on complete contract fulfilment—there is an alternative way of expressing that thinking: for revenue to arise there needs to have been an increase in assets or a decrease in liabilities, and Approach A assumes that:
 - (a) that increase in assets or decrease in liabilities will take the form of a right to consideration acquired; and
 - (b) a right to consideration will arise only on complete contract fulfilment.

Chapter 3—When does revenue arise? (Part 1—Critical event approaches)

3.15 The authors prefer this alternative way of expressing the thinking underlying Approach A for two reasons. First of all, it is expressed in language that seems to be more consistent with the asset/liability approach and the Framework; indeed, the simple principle that revenue arises only on complete contract fulfilment is not supported by an analysis of the Framework. Secondly, it highlights the assumptions that underlie the approach, and enables us to consider whether those assumptions are valid. This will be the theme of much of the discussion in the remainder of this chapter.

Approach B—A modification of Approach A that focuses on rights to consideration

The approach explained

3.16 We will start our discussion of various modifications of Approach A by focusing on the assumption described in paragraph 3.14(b)—that in a revenue-generating transaction a right to consideration arises only on complete contract fulfilment. In many legal jurisdictions a right to consideration can arise *prior* to complete contract fulfilment. The most obvious example of this is where the contractual terms give rise to a right to consideration part way through the contract. For example, a contract that imposes more than one performance obligation on the supplier might stipulate that, on fulfilling a specified obligation (or perhaps a specified group of obligations), a right to consideration will arise.

3.17 The key issue is therefore when might a right to consideration arise other than at the end of the contract? Approach B is based on the premise that a right to consideration arises prior to complete contract completion only if the contractual terms have that effect. (We will discuss various relaxations of this premise later in this chapter.)

3.18 What this means is that, if a right to consideration arises two-thirds of the way through the contract and a further right to consideration arises on complete contract fulfilment, Approach B would disaggregate the contract into two part-contracts—the first part-contract covering the first two-thirds of the whole contract and the second part-contract the last third. Revenue would then be accounted for separately for each part-contract by applying the draft principle in paragraph 3.8 to each of those part-contracts.

3.19 Thus, Approach B accepts that it might be necessary to disaggregate (or divide up or unbundle) the contract with the customer into part-contracts by reference to the points at which rights to consideration arise; whilst Approach A focuses on the contract as a whole, Approach B focuses on the performance obligations that the contract requires the supplier to meet and that, when fulfilled, will result in rights to consideration arising.

3.20 Under Approach B, the revenue recognition principle (compared to the Approach A principle described in paragraph 3.8) would be as follows:

Revenue arises when the entity fulfils all the performance obligations arising under a part-contract with a customer.

(A part-contract comprises one or more of the performance obligations required by the whole contract that, when fulfilled, will result in a right to consideration arising. If a right to consideration will arise only on contract completion, the 'part-contract' will be the whole contract.)

Revenue Recognition—A European Contribution

The approach applied to our five examples

3.21 In the five examples described in paragraph 3.4 above, there was no mention of any contractual terms that would cause rights to consideration to arise prior to complete contract completion. It is furthermore unlikely that there would be such a contractual term in the case of the Chair and Washing Machine examples, primarily because they are relatively short duration contracts. On the other hand, it is possible that such contractual terms exist for the other three examples.

- (a) *The Cleaner*—It is quite conceivable that the cleaning contract might stipulate that a right to consideration would arise in respect of each month's work successfully completed (or maybe even each week or each day). Assuming that there is a clause stating that a right to consideration would arise in respect of each month's work successfully completed, it would mean that under Approach B the contract would be disaggregated into twelve (month long) part-contracts. Then, as the performance obligations under each part-contract are fulfilled in their entirety, a right to consideration (and therefore revenue) would arise.
- (b) *The Bridge*—Assume in the Bridge example that the contract stipulates that the construction is to be undertaken in three stages and that, on completion of each stage, a right to consideration will arise. The result of this would be that, under Approach B the revenue relating to each stage of the contract would be recognised on fulfilment of the performance obligations relating to that stage.
- (c) *The Computer*—It is possible that the contract underlying the Computer transaction (ie the multiple-element arrangement) might, say, specify that a right to consideration will arise for the supply, connection and testing of the computer and software, and that another right to consideration will arise when the required tuition has been provided. If that were the case, under Approach B an appropriate amount of revenue would arise as soon as the supplier has supplied, connected and successfully tested the computer and software, with the balance of the revenue arising when the tuition has been provided.

Discussion

3.22 To summarise therefore, Approach B would achieve the same result as Approach A for simple transactions. However, for more complex transactions, depending on precisely what the contractual terms are it could result in revenue being recognised earlier—perhaps much earlier—than under Approach A.

3.23 Some criticise Approach B for focusing too much on the contractual terms underlying the transaction. They argue that under Approach B two entities undertaking contracts that are in substance exactly the same would recognise very different patterns of revenue simply because their contracts with customers include or exclude the contractual terms described in paragraph 3.17. However, others would argue that whether those terms are included in a contract is not simply a matter of 'form'; they alter the substance of the transaction (because the supplier has a right to consideration that it would not otherwise have had). If a contractual term affects the substance of a transaction, it is reasonable if the accounting focuses on that contractual term.

- 3.24 Perhaps more of a problem will be determining whether the contract contains the terms described in paragraph 3.17—in other words, determining whether the effect of the contractual terms is that rights to consideration arise at certain points during performance. Some contracts might explicitly address this issue, but many are likely to be rather vague on the subject. It may as a result be unclear whether the supplier has a right to consideration or some other right. It may also be difficult to know whether (and how) to impute the existence of a right to consideration from, for example, explicit customer acceptance.
- 3.25 Another criticism of Approach B is its assumption that rights to consideration arise only from the contractual terms; in many jurisdictions they could for example also arise from the operation of law. Similarly, some argue that Approaches A and B are wrong to focus exclusively on rights to consideration; in their view there are also other changes to assets and liabilities that can signal that revenue has arisen. Both these concerns are explored further in a moment, after a further variation of the approaches discussed to date (the substantive fulfilment approach) has been discussed and after we have paused to reflect on some notions that are emerging from our discussion to date ('The building blocks of a revenue recognition approach').

A variation on Approaches A and B—The substantive fulfilment approach

- 3.26 One of the criticisms that is sometimes made of the two approaches discussed so far is that they do not take into account the fact that transactions can be complete in substance but not in form. FW.35 states that for information to represent faithfully the transactions it purports to represent it is necessary that those transactions "are accounted for and presented in accordance with their substance and economic reality and not merely their legal form". This means amongst other things that, in determining the appropriate accounting for a transaction or other event, we should not allow ourselves to be distracted by things that are of no substance; and things that have no economic substance should have no accounting effect. In the context of revenue recognition, making sure that things with no economic substance have no accounting effect means not delaying the recognition of revenue because a contractual performance obligation that is of no economic consequence has not yet been fulfilled.
- 3.27 This suggests that we should perhaps modify the focus on 'complete performance' (of all contractual obligations in Approach A and of groups of performance obligations that give rise to rights to consideration in Approach B) and instead apply a 'substantively fulfilled' test.
- 3.28 Put another way, to date we have been focusing on 'completion' because we have been focusing on rights to consideration and have been assuming that they arise only on completion (of the contract in the case of Approach A and of the group of obligations that need to be met if a right to consideration is to arise in the case of Approach B). Maybe a right to consideration actually arises slightly before completion, when the contract (or performance obligations, depending on the approach adopted) has been substantively completed. In other words, when the only things that have not been done are non-substantive (ie have no substance).
- 3.29 For example, assume that a contract stipulates that the supplier should, when delivering the goods being sold to the customer, also provide details of the warranty arrangements that apply. However, when the supplier delivered the goods, it accidentally omitted that paperwork. Under a 'complete performance' approach, no

Revenue Recognition—A European Contribution

revenue would be recognised because the supplier has not yet done everything it is required to do. However, under a 'substantive fulfilment' approach, the supplier's failure to deliver the warranty paperwork would probably not prevent revenue from being recognised.

- 3.30 If we applied this substantive fulfilment approach to the examples described in paragraph 3.4, the modification would have an effect only if for one or more of the examples there has been complete performance (of the contract in the case of Approach A and of the group of obligations that need to be met if a right to consideration is to arise in the case of Approach B) except that one or more non-substantive acts have not been performed. In that case, the modification would result in revenue being recognised that would not otherwise have been recognised.
- 3.31 Many would probably view the 'substantive fulfilment approach' as an improvement on the approaches discussed to date, because by definition it is less 'form-based'. However, the modification is likely to have an effect only in fairly narrow circumstances and for that reason does not seem to be central to the revenue recognition debate. It is therefore not discussed further in the paper.

The building blocks of a revenue recognition approach

- 3.32 The authors think it would be useful at this point to pause and reflect on the concepts and other building blocks of revenue recognition that are emerging from our discussion.

The critical event approach

- 3.33 Before going any further, the authors wish to introduce and explain a term not so far used in the paper—'critical event approach'. 'Critical event approach' is a term used to describe an approach to revenue recognition that involves recognising no revenue under a contract until a particular event or threshold in the contract (the critical event) has been reached; then all the revenue is recognised either on the critical event occurring or between that point and the end of the contract.
- 3.34 There are a number of different types of critical event approach, depending on the event selected as the critical event and on how revenue is recognised when the critical event has occurred. Approach A is a critical event approach, with the critical event being complete contract fulfilment. Approach B is also a critical event approach, although in that case the critical event is meeting the contractual terms that result in a right to consideration arising. The substantive fulfilment approach is also a critical event approach, as are all the other approaches (including Approach C) discussed in this chapter.
- 3.35 The alternative to a critical event approach is the so-called 'continuous approach'. A continuous approach is an approach to revenue recognition that involves recognising revenue continuously over the course of the contract as the contract progresses and the supplier performs. The next chapter discusses continuous approaches, and Approach D is one such approach.

Chapter 3—When does revenue arise? (Part 1—Critical event approaches)

Perspectives

- 3.36 An issue arising from the draft revenue recognition principles developed so far is from whose perspective or point of view (ie through whose eyes) should performance be assessed? From the perspective of the supplier or the customer? For example, in Approaches A and B we have been focussing on the point at which a right to consideration arises and have been exploring the view that such a right arises only when the related performance obligations have been met in full. Under such approaches, should we be focusing on when the supplier thinks it has fulfilled its relevant performance obligation or on when the customer thinks that obligation has been fulfilled?
- 3.37 As will become clearer from some of the discussion later in the paper, the choice of perspective can lead to fundamentally different patterns of revenue.
- 3.38 The authors believe that one particular perspective is not necessarily better than the other; it is simply that one perspective may be better suited to one particular approach and another perspective might be better suited to another approach. Indeed, sometimes—though not always—the perspective is an inherent feature of the approach being used. For example, if the revenue recognition approach focuses on the costs incurred on the activities undertaken pursuant to the contract (ie inputs), as some of the approaches discussed later in the paper do, a supplier perspective will be an inherent feature of that approach. On the other hand, if the focus is on outputs, either perspective could in theory be used.
- 3.39 Generally speaking, because the perspective used can make a significant difference, the perspective applied is an important aspect of the debate about which revenue recognition approach is the most appropriate.

Customer acceptance

- 3.40 For revenue to arise under a revenue recognition approach that is based on fulfilment of performance obligations, one needs evidence that the supplier has met its performance obligations. In other words, if a contract requires the supplier to supply a particular item of goods to a customer, it is not enough for the supplier to then deliver any old rubbish to the customer; it must deliver to the right location at the right time the right item of goods in the right condition. Similarly, in the case of a contract for services, the supplier will need to deliver the right quality of service at the right time. In the case of many contracts, the simplest way of determining whether the supplier has met its performance obligations is to look for some evidence of customer acceptance.
- 3.41 The fact that the customer has paid the contract amount is usually evidence of customer acceptance. However, payment generally takes place some time after the supplier has met its performance obligations, so using that as evidence of customer acceptance is not ideal because our objective is to determine the exact moment at which the supplier has met its performance obligations.
- 3.42 Sometimes a contract can be so complex that it is difficult to know whether the supplier has performed fully unless and until there has been customer acceptance. In such circumstances, the contract will usually stipulate that there needs to be explicit customer acceptance of the supplier's work. For example, contracts that involve work

Revenue Recognition—A European Contribution

carried out over a long period of time, such as construction contracts, typically ask for explicit customer acceptance at each stage in the contract. In such a case the customer is accepting the completion of parts of the contract.

3.43 This raises another important issue. Let us consider the Bridge example again.

The Bridge

A customer enters into a contract with the supplier (a construction company) that requires the supplier to build a bridge to the customer's design and specification. The contract envisages that the bridge will take three years to complete.

Let us further assume that the bridge is to be built in stages with each new stage being built on (or connected to) the stages already completed. In such cases, it is usually the case that, although customer acceptance is required at each stage of the work, that acceptance need only be conditional until the bridge as a whole has been completed, at which point the customer is expected to accept unconditionally the bridge as a whole. Does customer acceptance have to be unconditional for revenue to arise or will conditional customer acceptance suffice? Or, to put it another way, does a right to consideration arise if the customer has only conditionally accepted the supplier's work?

3.44 In the footnote to paragraph 3.7, we explained that a right to consideration is an enforceable and unconditional right. The authors believe that, if that is right, conditional customer acceptance will not be sufficient to give rise to a right to consideration. Others disagree, in some cases because they do not see rights to consideration in the same way as the footnote.

3.45 The authors think that in such discussions there is a tendency to lose sight of our objective, which is to determine whether or not the supplier has met its performance obligations (ie has performed). The absence of explicit unconditional customer acceptance at the end of each stage does not necessarily mean that the supplier has not performed, merely that we need to use some other method of determining whether performance has occurred. For example, in some cases there may be evidence of implicit acceptance by the customer. However, it may be that, even without any evidence of customer acceptance, it will be possible to reach reasonable conclusions about whether the supplier has performed. This will typically be the case when a third party is involved, either in assessing or, in the case of physical items, in storing or physically delivering those items. For example, it may be that the agreement is that a third-party (usually an independent third-party) will assess the supplier's work and reach a conclusion on the extent to which the supplier has performed. Another example might be when a third-party is being used to deliver physical items; depending on the terms of the contract, the supplier might fulfil its performance obligations by delivering the items to the third-party deliverer.

The story so far

3.46 We began this chapter by noting that the Framework tells us that revenue is recognised when it arises and can be measured reliably. We then decided to consider when revenue might arise.

(a) We noted that, under the asset/liability approach, revenue will not arise unless there has been an appropriate increase in assets or decreases in liabilities.

Chapter 3—When does revenue arise? (Part 1—Critical event approaches)

- (b) The key, we noted, was to identify when this occurs. We decided to explore various different viewpoints and premises and various modifications to those viewpoints and premises to see what they tell us about when revenue arises.
- (c) We started with the premise that revenue is something an entity gets for doing what it has promised to do for a customer. That led us to explore an approach to revenue recognition based on the view that revenue does not arise until the supplier has *finished* doing what it promised to do (Approach A).
- (d) We re-expressed Approach A in language more consistent with the asset/liability approach and the Framework generally, and noted that fundamental to the approach were two assumptions: that the only type of increase in assets or decrease in liabilities that will arise from revenue-generating activity will take the form of a right to consideration acquired; and that a right to consideration arises only on complete contract fulfilment.
- (e) We took a further look at the second assumption and concluded that it was not correct because rights to consideration can arise in other circumstances. In particular we noted that they can arise prior to complete contract fulfilment if the contract terms stipulate that such rights will arise. We therefore explored an approach (Approach B) that focused on the rights to consideration that arise from specific contractual terms. This revenue recognition approach involved disaggregating the contract into part-contracts.
- (f) Finally, we noted that Approach B can be criticised for assuming that rights to consideration arise only on contract completion or from the contractual terms—in some jurisdictions at least they can also arise from operation of the commercial law. We also questioned the other assumption underlying the approaches discussed so far, that the only type of increases in assets or decreases in liabilities that indicate that revenue has arisen is the acquisition of a right to consideration.

3.47 In the remainder of this chapter we explore some approaches that seek to address the concerns referred to in (e) above. Before we do so, the authors think it would be useful to make a few general observations.

Rights to consideration

- 3.48 Although the authors have explained what they mean by a ‘right to consideration’ (see the footnote to paragraph 3.7), they have not attempted so far to analyse precisely when such a right arises. That has been deliberate—there are different views on the issue and those views seem to depend at least to some extent on the legal framework under which the position is being analysed. As a result, the same activities undertaken pursuant to the same contract may result in a right to consideration under one country’s legal framework but not under another. This does not sound like a very promising notion on which to build a principles-based approach to revenue recognition.
- 3.49 For that reason, the remainder of the discussion in this paper focuses on increases in assets and decreases in liabilities, rather than on rights to consideration. This leads to our second observation, which is that there appears not to be universal agreement at present that revenue can arise when a right to consideration does not arise.

Indeed, some are firmly of the view that revenue can never arise unless a right to consideration arises. One argument used in support of this view by some is that revenue only arises when there has been an exchange of goods or services for a right to consideration (which is why the notion of an exchange is central to some people's view of revenue). However, our definition of revenue does not limit itself in that way—it talks of gross inflows of economic benefits generally, rather than just those that result from a right to consideration arising.

Disaggregating contracts

3.50 Unless we are applying a revenue recognition approach based on complete contract fulfilment, it will generally be necessary to disaggregate the contract into part-contracts.¹⁷ There are in theory many different ways of disaggregating a contract, and we have already (in our discussion of Approach B) discussed one of them. In the remainder of this chapter we explore other ways. These disaggregation approaches have been chosen because they seem to show some initial promise or they highlight an interesting point. The authors recognise that there may be other disaggregation approaches worth exploring further.

A modification of Approach B—Disaggregating the contract by reference to customer acceptance points

The approach explained

3.51 As already discussed, in the case of some contracts—typically those that are long or complex—there will be points arising during the supplier's performance under the contract when the customer will in some way accept or reject the supplier's performance. The supplier is not indifferent to the 'act of customer acceptance'; when the customer accepts the supplier's work or the goods supplied by the customer, the supplier is better off than it was before customer acceptance. For that reason, it is often suggested that it might be appropriate to use the 'customer acceptance points' to divide up the contract. In other words, each customer acceptance point could be treated as the end of a part-contract. This would of course involve taking a customer perspective.

3.52 In many cases the customer acceptance points will also be the point at which a right to consideration arises, but that will not necessarily always be the case. However, even if a customer acceptance does not give rise to a right to consideration, it might still result in an inflow of economic benefits that cause assets to increase or liabilities to decrease.

3.53 However, before we start to investigate that further it is worth reminding ourselves that, when we discussed customer acceptance earlier in the chapter, we noted that the only reason customer acceptance is significant is because it provides evidence that performance has been deemed by the customer to be satisfactory; and in some transactions it will be only one of the ways that can be used to ascertain that. This suggests that customer acceptance in itself is not a significant event; merely one indication that a significant event has occurred. For that reason the authors believe the approach is not worth exploring further.

¹⁷ As discussed more fully in the next chapter, disaggregation is not necessary under all versions of the continuous approach.

If revenue could reverse, is it premature to recognise it?

- 3.54 Before moving on to explore a different disaggregation approach, the authors wish to discuss briefly an issue that a disaggregation approach based on customer acceptance points highlights: the so-called ‘reversibility’ of revenue.
- 3.55 Some believe that revenue once recognised should never be reversed; in other words, that revenue once recognised should not subsequently be derecognised. Presumably this means they believe that revenue should consist entirely of credit items; there should be no debit items.
- 3.56 This is important because such a view leads some commentators to argue that revenue should not be recognised unless and until there is no realistic possibility that some or all of that revenue might need to be derecognised subsequently. When the focus is on unconditional rights to consideration (as it is in the case of Approaches A and B), reversibility is not an issue. However, in other circumstances—such as for example when revenue arises as a result of a conditional customer acceptance—reversibility can be an issue.
- (a) Some point to FW.93, which states that “the procedures normally adopted in practice for recognising income ... are generally directed at restricting the recognition as income to those items that can be measured reliably and have a sufficient degree of certainty.” In their view the possibility that revenue may need to be reversed is a key factor in determining the reliability and certainty of the revenue number. Others argue however that reversibility has nothing to do with reliability and certainty. In their view, revenue can arise, should be recognised and is both reliable and certain even though there might remain a reasonable possibility that later it may be necessary to adjust (or even eliminate) the amount of revenue recognised.
- (b) Reversing the recognition of revenue also means derecognising some or all of an asset (or increasing a liability). To have an asset one needs control, and some argue that control cannot exist if there remains a possibility that the asset might need to be derecognised. Put another way, they argue that an approach that involves recognising revenue that might reverse is not compatible with the asset/liability approach. However, others believe that argument is not valid; an entity can have control of something even if in certain circumstances it can be required to give up that control.
- 3.57 Apart from the explanation in FW.93 that has already been quoted, there does not appear to be anything in the Framework or in existing standards that indicates that revenue arises only when there is no realistic possibility of reversal. Indeed, the Framework would appear to suggest that talking about ‘reversing’, or even ‘derecognising’, revenue is perhaps not the most helpful way of looking at the issue. Under the Framework, if there has been a particular type of increase in assets or decrease in liabilities, revenue will have arisen and the assets and/or liabilities involved need to be measured to determine the amount of revenue that has arisen. If the entity subsequently reaches a different conclusion as to the existence of the increase in assets or decrease in liabilities or the amount of that increase/decrease, adjustments will need to be made, and this may result in debit items being recognised in revenue.

Revenue Recognition—A European Contribution

- 3.58 Having said that, when developing a standard on revenue recognition, standard setters will need to take a view as to what degree of reliability and certainty is needed for the qualitative characteristics to be met and revenue to be recognised. This is partly about recognition—am I sufficiently sure that an appropriate increase in assets or decrease in liabilities has arisen—and is partly about measurement (including remeasurement).
- 3.59 This issue of reversible revenue will arise under every revenue recognition approach that is not based on rights to consideration or unconditional customer acceptance points. It arises therefore under the next two approaches discussed in this chapter, and also under many of the continuous approaches discussed in the next chapter.

A second modification of Approach B—Disaggregating the contract by breaking it down into items of part-output that have value to the customer (Approach C)

The approach explained

- 3.60 In Approach B we disaggregated contracts by reference to performance obligations. In that approach however we were still focusing on rights to consideration, so we disaggregated the contract only to the extent necessary for fulfilment of each separate part-contract to result in a separate right to consideration. However, we have since concluded that we probably should not be focusing on rights to consideration because there are other types of increases in assets and decreases in liabilities that give rise to revenue. Therefore, in this section and the next section we explore the possibility of disaggregating the contract more than Approach B does.
- 3.61 In particular, we will consider an approach (Approach C) that involves disaggregating contracts by reference to things (items of part-output) that have value to the customer. Under such an approach, revenue would be treated as arising when each part-contract (represented by an item of part-output of value to the customer) is fulfilled by the supplier.
- 3.62 The premise underlying such an approach is relatively straight-forward. Revenue arises when there has been an increase in assets or a decrease in liabilities. Business entities do not usually do things for nothing; when an entity carries out activities pursuant to a contract with a customer, it is doing things that create value to the customer and, as a result, it receives something of value in return. Therefore, if we focus on the point at which the customer receives something of value, we will have identified the point at which revenue arises.
- 3.63 Before going any further, we need to consider whether Approach C is an asset/liability approach. As we have just said, the supplier will not undertake tasks for the customer without being rewarded for doing so, but does that 'expected reward' represent an increase in assets or decrease in liabilities? Some argue that, although a right to consideration might not have arisen, some sort of 'due from customer balance' has arisen and that balance represents an increase in assets. Some support this view by pointing to the language used in IAS 11. The authors agree that what the supplier receives as a reward under this approach is similar to the asset that is recognised under IAS 11. However, they do not think that 'due from customer balance' is a good label: the one thing it is not is due from the customer, at least not when it is first recognised. It is in effect the claim the supplier will have someday but does not have yet. That asset is henceforth referred to simply as a 'contract asset'.

Chapter 3—When does revenue arise? (Part 1—Critical event approaches)

- 3.64 We need also to ‘operationalise’ the notion of items of part-output that have value to the customer.¹⁸ Under certain circumstances it may be possible to assess directly whether the part-output has value to the customer. In other circumstances it will be possible to make that assessment only indirectly. For example, this could be done by saying an item of part-output has value to the customer if it can be sold or used by the customer.
- 3.65 It is sometimes argued that anything can be sold as long as one is not too fussy about the price one receives. Similarly, it is often possible to use a partly-finished item for some other purpose—for example, a half finished computer screen could perhaps be used as a fruit bowl. However, that is not what was meant when we asked whether the customer could sell or use the part-output. The rationale is that, although the supplier has not yet performed in full, it has performed in part and the result is that the customer has received something of value that it expected to receive as part of the output from the contract. If, for example, the supplier promised to provide its customer with a computer but has provided it with a part-finished computer that can be used only as a fruit bowl, the customer has not received something it expected to receive and will as a result not consider itself to have received something of value. On the other hand, if the supplier, having promised to provide its customer with a computer, has provided the processor but not the screen or keyboard, the customer has received part of the output it expected to receive. The customer has received something that it values. Therefore it is suggested that what we are really asking is whether the part-output is usable by the customer for its intended purpose or whether it can be sold by the customer at a price that reflects its worth when used for that intended purpose.
- (a) By ‘usable by the customer for its intended purpose’ we mean:
- (i) It could be used by the customer without further work on a standalone basis for its intended purpose. This would directly demonstrate a value to the customer, because the part-output is ready for its intended use as it stands.

¹⁸ This notion of an item of part-output having value to the customer is very similar to the notion of standalone value to the customer set out in EITF 00-21. Under EITF 00-21, in an arrangement with multiple deliverables a delivered item should be considered a separate unit of accounting if all of the following criteria are met:

- The delivered item has a value to the customer on a stand-alone basis;
- There is objective and reliable evidence of the fair value of the undelivered item; and
- If the arrangement includes a general right of return relative to the delivered item, delivery of the performance of the undelivered item is considered probable and substantially in the control of the vendor.

A deliverable has value on a stand-alone basis if any vendor sells it separately or if the customer could resell the delivery item on a standalone basis. EITF 00-21 does not require the existence of an observable market for the deliverable, only the theoretical ability to sell the deliverable. It takes the view that, without evidence of the fair value of each element in an arrangement, a company would be unable to determine the amount of the total arrangement fee that should be recognised as revenue upon delivery of each of the elements in the arrangement. EITF 00-21 distinguishes between a general right of return and all other return of refund provisions in an arrangement. The criterion above on a general right to return is there to make sure that delivery or performance of the undelivered item is in control of the vendor so that the vendor can reasonably estimate the right to return. If so, the right to return does not impact the ability of the vendor to separate the arrangement and recognise revenue for the delivered element if all the revenue criteria are satisfied.

Revenue Recognition—A European Contribution

- (ii) It could be used by the customer for its intended purpose if it is made operational (for example, a dishwasher that needs to be connected to be able to work), and the customer has access to someone other than the supplier who could make it operational.
 - (iii) It could be used by the customer for its intended purpose if it is connected to other freely available components (for example, a screen that is connected to a computer).
- (b) And, by 'can be sold by the customer' we mean that:
- (i) the supplier habitually sells that part-output separately, and the customer could get access as a seller to that market place,
 - (ii) the customer habitually buys or sells that part-output separately, or
 - (iii) although neither the supplier nor the customer habitually buys or sells that part-output separately, a market exists for items that are in substance the same as the part-output and there is no reason why the customer could not access it as a seller.

Thus, an item that is being constructed but is half-finished will not represent part-output that is of value to the customer because it is neither usable for its intended purpose nor sellable at a price that would reflect its worth when used for that intended purpose.

3.66 Under Approach C, the revenue recognition principle would probably be the same as for Approach B, but there would be a different definition of a part-contract:

Revenue arises when the supplier fulfils all the performance obligations arising under a part-contract with a customer.

Each part-contract comprises the work necessary to produce an item of output that the customer can either use for its intended purpose or can sell at an amount that reflects its worth when used for that intended purpose.

The approach applied to our five examples

3.67 Approach C can be illustrated by considering the five example transactions summarised in paragraph 3.4 above.

- (a) *The Chair*— Under Approaches A and B, revenue would arise at the point at which the supplier hands over the chair. That would be the case under Approach C as well, because there is no part-output.
- (b) *The Washing Machine*— Under Approaches A and B, revenue would arise at the point at which the supplier connects up the washing machine and ensures it works. Under Approach C, we would need to consider whether the supplier's performance obligations should be broken down into part-contracts. For example, depending on what the work involves, it might be appropriate to disaggregate the work needed to extend the existing water pipes to the place where the machine is to be located ('the piping work') from the work needed to connect the extended piping to the machine ('the connection work').

Chapter 3—When does revenue arise? (Part 1—Critical event approaches)

Typically, if the work (in this case the piping work and connection work) is not particularly specialised, each of the outputs would be usable for its intended purpose (as defined) so Approach C would require disaggregation—subject to materiality considerations. On the other hand, if for example the connection work is highly specialised and could not be done by anyone other than the supplier, it would not be appropriate to treat it as a part-contract separate from the other work.

- (c) *The Cleaner*—Under Approach C, each day's cleaning activity would be viewed as a separate part-contract because it is usable (in this case consumable) for its intended purpose. Therefore, revenue would be recognised on a daily basis as long as the supplier is fulfilling its daily performance obligations.
- (d) *The Bridge*—A partly finished item will not represent an item of part-output that has value to the customer in the way that that notion is described in the paper. Therefore, the construction phase part of the construction contract in our example will not be disaggregated under Approach C and no revenue will arise on that construction phase until construction is complete. However, if the contract as a whole has, say, a planning stage and a design stage as well as a construction phase, it may well be appropriate to disaggregate the contract by reference to those phases and recognise revenue separately on each.
- (e) *The computer*—It would appear that there are several part-outputs in this transaction that would have value to the customer: delivery of the computer, delivery and installation of the off-the-shelf software, the connection service, and the tuition. Therefore, under Approach C, the contract would be disaggregated into part-contracts on the basis of those part-outputs and revenue would be recognised on each of these part-contracts separately as the work involved is completed.

In our example, the computer does not need specialised software in order to be operational. However, had the example been slightly different and, as a result, software specially tailored to the system and the customer is needed to make the computer operational, it is unlikely that the supplier would be able to account for the revenue on supplying the computer separately from supplying and installing the software. In other words, the computer hardware might not be deemed to be an item of part-output that has value to the customer because it is useless without the software and the software might not be available from other market participants. If that is the case, revenue will not arise on supplying the hardware until the software has also been supplied and installed—not even if the computer hardware represents the vast majority of the value of the contract.

Discussion

- 3.68 There are a number of different ways of operationalising the notion of “items of part-output that have value to the customer”. The particular version described in paragraphs 3.64-3.66 (ie Approach C) is likely to have the same effect as Approaches A and B for simple contracts for the sale of goods (such as the Chair example) and typical construction contracts (such as the Bridge example)¹⁹—which means that revenue would still not arise until the end of the contract. On the other hand, for the some service contracts (such as the Washing Machine and Cleaner examples) and multiple-element arrangements (such as our Computer example) that do not involve elements that are so closely connected that one cannot function without the other, it will have a different effect from Approaches A and B because revenue will be recognised earlier.
- 3.69 Approach C appears to be the most complicated of the approaches discussed so far and probably involves considerably more judgment than Approaches A and B. This concerns the authors although it may be that, with further thought and work, the approach could be refined and, as a result, made simpler and more principles-based.
- 3.70 There is another issue. Consider the following example:

The Swimming Pool

A customer enters into a contract that requires the supplier (a builder of swimming pools) to construct a swimming pool of a specified shape, size and depth in a specified location within his garden.

The supplier starts its work by moving various items of equipment into the customer's garden (Stage 1). Stage 2 will be to dig out the hole for the swimming pool. When it has dug a hole of the right shape, size and depth and in the right location, it stops digging and commences Stage 3: lining the hole and attaching various pumps to the hole and lining.

- 3.71 This example is a good illustration of how Approach C is intended to work because, at the end of Stage 1, although performance has commenced (the supplier has moved various items of equipment into the customer's garden) the customer has not received anything that meets our definition of part-output that is of value to the customer. Therefore, at that stage under Approach C no revenue will have arisen. However, at the end of Stage 2—ie when the supplier has dug a hole of the right shape, size and depth and in the right place but before it has lined that hole—there is part-output that is of value to the customer, so revenue will arise.
- 3.72 In effect, what the approach does is provide a principle that can be used to disaggregate multiple-element arrangements. However, the approach also raises a number of additional questions. For example,
- (a) is it right that revenue only arises when the hole has been completed, or does it also arise when all that has been dug is a part-hole? Put another way, is it appropriate to recognise no revenue on the construction phase of the bridge

¹⁹ ie construction contracts that do not require unconditional customer acceptance until the contract has been completed.

example until the phase is completed? Or, to express the point more generally, if our focus is on performance obligations that result in value for the customer, why focus only on the *completion* or fulfilment of those performance obligations? In many cases is it not also true to say that the partial performance of those obligations also results in some sort of benefit for the customer? If that was not the case, the customer would not have contracted the supplier to do it and the supplier would not be doing it. As mentioned in paragraph 3.68, there are a number of different ways of operationalising the notion of “items of part-output that have value to the customer”. Approach C is one way (and EITF 00-21 is, broadly speaking, another way (see the footnote to paragraph 3.64)). Another variation might involve a relaxation of the Approach C principle that a partly finished item is not an item of part-output. It could, for example, be argued that a partly finished item will have value to the customer if it is possible for the customer or a third party to whom the customer has access to finish the item. Such a modification of Approach C would often result in a significantly different accounting result in the case of our bridge example. In particular, as long as the work is not so specialised that no one other than the supplier can do it, the modification would result in revenue arising recognised as the bridge construction progresses. Similarly, in the swimming pool example, it would result in revenue arising as the hole is being dug (in other words, as contract performance progresses from Stage 1 to Stage 2).

- (b) the discussion in (a) of a variation of Approach C leads the authors to ask whether the focus should be on the contract’s progress, rather than on items of part-output that have value to the customer; in other words, whether it would be more appropriate to recognise revenue continuously as the entity performs in accordance with the contract. This approach is explored in the next chapter.
- (c) why should some activities that the supplier has to perform in order to fulfil its obligations under a contract with a customer (ie the Stage 2 activities in our swimming pool example) be revenue-generating while some other activities (ie the Stage 1 activities) are not? This leads the authors to consider a further modification—an approach that focuses on individual performance obligations.

A third modification of Approach B—Disaggregating the contract so that each and every performance obligation represents a separate part-contract

- 3.73 In Approach C we disaggregated contracts by reference to items of part-output that have value to the customer. However, at the end of the discussion we found ourselves asking why under that approach some activities that the supplier is required to perform in order to fulfil its obligations under a contract with a customer should be revenue-generating while some other activities are not. In this section we explore the possibility of disaggregating the contract into individual performance obligations so that each and every performance obligation will be treated as a separate revenue-generating part-contract.
- 3.74 The premise underlying such an approach is straight-forward. The customer has agreed with the supplier that the supplier will undertake a series of tasks for the customer. The supplier will not undertake tasks for the customer without being rewarded for doing so and it is that reward that this approach recognises as revenue.

Revenue Recognition—A European Contribution

- 3.75 Although we would need to consider whether an approach that focuses separately on the fulfilment of each and every performance obligation is compatible with the asset/liability approach, the authors see this issue in the same way as they did when considering the issue in the context of Approach C (see paragraph 3.63).
- 3.76 In order to make such an approach operational, it will be necessary to determine what an *individual* performance obligation is. Let us consider the Cherrywood table example that is also discussed in Appendix II

The Cherrywood Table

An individual walks into a furniture shop, sees an oak table, and enters into a contract with the shop for a table of the same design as the oak table but made in cherrywood to be delivered to their house in three months' time.

- 3.77 How many performance obligations does this transaction involve? If the supplier has a cherrywood table in stock, all it will have to do is to arrange for the table to be delivered to the customer. That sounds like a single performance obligation. On the other hand, if the table is not in stock or if for some reason the supplier chooses not to supply from stock, the supplier will (to somewhat oversimplify the process) have to buy the wood, make the table and then deliver it. Viewed from the supplier's perspective that could be three performance obligations, although viewed from the customer's perspective it is probably still just one—the delivery of a cherrywood table.²⁰ Would it make a difference if the customer knew that the supplier was going to have to buy the wood and make the table before delivering it? These are all issues that would need to be addressed to make this approach operational.
- 3.78 The authors have not attempted to answer those questions in this paper because they believe it is more fruitful to explore the other suggestion made in paragraph 3.72: whether it might be more appropriate to recognise revenue continuously as the entity performs in accordance with the contract. That approach is explored in the next chapter (Approach D).

Some concluding remarks on this chapter's discussion

- 3.79 In this chapter the authors have considered a number of different approaches that are all based on the basic premise that revenue is what an entity gets for doing something it promised to do for a customer. The approaches discussed are based on different views as to what that 'something' should be—for example, Approach A focuses on complete contract fulfilment, Approach B on complete fulfilment of the contractual terms that give rise to a right to consideration, and Approach C on complete fulfilment of the performance obligations that result in the customer having an item of part-output that has value to it—but they all assume that revenue arises once something has been done. (There is another view, which is that revenue arises as the supplier does something, not *once* it has done it. That view is explored in the next chapter.)
- 3.80 The need for a right to consideration was the main determining factor in Approaches A and B. Some believe that revenue cannot arise without there being a right to

²⁰ This illustrates the importance of the 'perspectives issue' that was discussed earlier.

Chapter 3—When does revenue arise? (Part 1—Critical event approaches)

consideration; in their view until such rights have arisen, the supplier is merely carrying out activities for a customer in the hope that it will be rewarded.

- (a) Under Approach A, revenue arises only when the supplier has fulfilled all its performance obligations under the contract. This approach is very simple to apply and, for probably the majority of transactions, will produce the same accounting result as Approaches B and C—and indeed, current practice. However, under the approach no revenue would arise on a long-term construction contract or a multiple-element arrangement until the contract has been fully performed by the supplier, and some believe that is not a faithful representation of the entity's activities. Furthermore, the approach assumes that, for revenue to arise, a right to consideration needs to have arisen and that will happen only on complete contract fulfilment. The authors question the validity of this assumption.
- (b) Under Approach B, revenue arises whenever the contractual terms give rise to a right to consideration, regardless of whether that is at the end of the contract or part way through the contract. Approach B would achieve the same result as Approach A for simple transactions. However, for more complex transactions, depending on precisely what the contractual terms are it could result in revenue being recognised earlier—perhaps much earlier—than under Approach A. As a result, some argue that the approach gives a better representation of an entity's revenue-generating activities than Approach A. The approach also does not rely on the assumption that the authors questioned at the end of (a). However, it does assume that a right to consideration arises only from the terms of the contract with the customer. Some argue that this places too much emphasis on the contractual terms underlying the contract, but there is a bigger concern: some believe the assumption is not right. In their view, rights to consideration could also arise, at least in some jurisdictions, from the operation of law.
- (c) Both Approaches A and B are based on the assumption that revenue arises only when a right to consideration arises. Readers may recall that back in Chapter 2 (see paragraphs 2.28-2.29) we discussed the possibility that revenue would arise only when a supplier supplies services or goods to another party and in return or as a result receives a right to consideration. However, some disagree. They argue that revenue can arise even though there is no right to consideration this is not a valid assumption. Furthermore, they note that there is nothing in this paper's analysis to date that supports the view that the only increase in assets or decrease in liabilities that will be revenue is the acquisition of a right to consideration. Finally, in (b) we noted that some believe that rights to consideration can arise from the operation of law, which means that approaches based on rights to consideration will have different implications in different legal jurisdictions. Some would argue that that is not an appropriate foundation on which to build a principles-based approach to revenue recognition.

Revenue Recognition—A European Contribution

- 3.81 The third approach (Approach C) does not focus on rights to consideration; instead it is based on the premise that the supplier earns revenue by providing things of value to the customer. One advantage of this approach is that it provides a clear principle that can be used to disaggregate multiple-element arrangements. However, some would argue that—depending on precisely how it is operationalised—it might work less well for construction contracts and some other single-element but long duration contracts. The approach is also more complex than Approaches A and B, and might need quite a lot of additional guidance to enable it to be applied consistently. Having said that, the approach is not dissimilar to the approach adopted in the US' EITF 00-21, so it is capable of being made operational. Nevertheless, the authors' ideal revenue recognition approach would be one that involves only a few simple principles and no rules or extensive guidance. Finally, although the authors believe that Approach C is an asset/liability approach, some disagree.
- 3.82 In the next chapter we will consider a type of approach that takes a very different view of revenue to the approaches described in this chapter.

CHAPTER 4—WHEN DOES REVENUE ARISE? (PART 2—CONTINUOUS APPROACHES)

Although it is agreed that revenue should be recognised when it arises, there is no agreement as to when that is. This chapter and the previous one explore some different views on the matter.

Chapter 3 explored three approaches in detail, all of which are based on the principle that revenue arises only once a specified event has occurred or a specified threshold or hurdle has been met. This chapter explores a type of approach based on the principle that revenue arises throughout the supplier's performance of the contract and that revenue is a measure of performance towards completion. This type of approach is known as the continuous approach.

Under the continuous approach, revenue is usually a good measure of economic activity undertaken pursuant to a customer contract. Many see this as a major advantage. There is also less need to develop the sort of complex disaggregation techniques we discussed in the latter part of Chapter 3—which is another significant advantage.

An alternative to the critical event approach—the continuous approach (Approach D)

- 4.1 As already mentioned, a critical event approach to revenue recognition involves recognising no revenue under a contract until a particular event or threshold in the contract (the critical event) has been reached; then recognising all the revenue either on the critical event occurring or between that point and the end of the contract. IAS 18 is based largely on a critical event approach.
- 4.2 There is an alternative revenue recognition approach—the so-called continuous approach. Under this approach, revenue is recognised continuously over the course of the contract as the contract progresses and the supplier performs. IAS 11 is based on the continuous approach.

The approach explained

- 4.3 The 'progress' of the contract can be measured in a number of different ways, including for example:
 - (a) as the supplier incurs the costs inherent in the contract;
 - (b) as the risks inherent in the transaction decrease or are eliminated by the supplier;
 - (c) as the value of the goods created under the contract increases; or
 - (d) with the passage of time.

Revenue Recognition—A European Contribution

4.4 These various ways of measuring progress will be discussed in greater detail in a moment, but first we want to make a couple of general observations.

- (a) How the progress of the contract is measured can make a significant difference to the pattern of revenue recognised because there is no reason why one possible measure (say, costs inherent in the contract) should increase at the same rate as another possible measure (say, increases in value). This makes the choice of measure important.
- (b) The general principle should be to choose the measure that best reflects progress of the contract, although practicality considerations will also play a role. Often it will be relatively easy to select a measure because one measure will be clearly the best. However, that will not always be the case and in such circumstances inconsistencies between entities might arise.

An alternative way of viewing this issue is to say there are a number of different continuous approaches, each based on a different way of measuring progress. We could then debate which approach is the best conceptually. The authors do not favour this approach because they believe a measure that works well for one type of contract may be impractical for another; in other words, they believe that in practice no single measure of progress will be the most appropriate in all circumstances.

- (c) In the previous chapter we discussed ‘perspective’; in other words, whether performance should be judged from the perspective of the supplier or the customer (see paragraphs 3.36-3.39.) Perspective is also a relevant issue under the continuous approach. For example, some measures of progress (for example costs incurred) are input-oriented and will therefore inevitably involve a supplier perspective. On the other hand, some will be output-oriented (for example, increases in the value of the goods created), where it can be more appropriate to adopt a customer perspective. Sometimes both perspectives are possible. However, regardless of whether the measure is input- or output-oriented, the objective under the continuous approach is to measure the supplier’s performance of the contract so, to that extent, it will always be supplier-oriented.

4.5 Although the critical event and continuous approaches will be compared and contrasted later, the authors think it might be helpful to make the following comments at this stage.

- (a) One way of looking at the continuous approach is to view it as a critical event approach that involves an extreme form of disaggregation. We ended the previous chapter by briefly considering a critical event approach that involved disaggregating the contract by reference to performance obligations, so that each separate performance obligation represented a separate part-contract. If we had taken that idea further and disaggregated the contract by reference to every single little act of performance, we would have had in effect a critical event approach that is also a continuous approach.
- (b) Even though the continuous approach can be likened to an extreme form of critical event approach, there are differences on some key issues. For example, whilst critical event approaches tend to focus primarily on the claim the supplier

Chapter 4—When does revenue arise? (Part 2—Continuous approaches)

has against the customer, continuous approaches focus on what the supplier has done in order to fulfil the contractual performance obligation (which is why they are also sometimes referred to as the performance approach to revenue recognition). Furthermore, as most critical event approaches focus on claims against the customer, they tend to be customer-oriented, which means they generally apply a customer perspective. As already explained, continuous approaches will be supplier-oriented.

- (c) Although we have just said that the continuous approach involves an extreme form of disaggregation, the disaggregation method used—progress—is much simpler than the disaggregation methods that underpin the various critical approaches. However, that is not to say that applying a continuous approach takes away the need to disaggregate the contract except by reference to progress, because it might still be appropriate. This is discussed later in this chapter.

Ways of measuring progress

As the supplier incurs the costs inherent in the contract

- 4.6 In paragraph 4.3 several different methods of measuring progress under the contract were mentioned. The first method involved focussing on the costs that the supplier is incurring that are inherent in the contract. Put simply, if it is estimated that the total costs to be incurred by the supplier in order to meet its obligations under a contract with a customer are €100 and it is estimated that the supplier has to date incurred €25 of those costs, the contract will be treated as 25% completed and 25% of the total revenue arising on the contract will be deemed to have arisen.
- 4.7 This method of measuring progress is similar to the cost measurement approach used under the percentage of completion method set out in IAS 11. As such, the method is already being used by many entities to account for their long-term construction contracts.
- 4.8 As already explained, if the incurrence of cost best reflects progress of the contract under consideration, then such a measure will be used subject to practicality considerations; in other words, subject to the supplier having reliable estimates of total costs to be incurred and evidence of actual costs incurred to date. These are considerations that IAS 11 also requires to be taken into account.

As the risks inherent in the transaction decrease or are eliminated by the supplier

- 4.9 A second method of measuring progress is to focus on the risks inherent in the transaction; in particular on the elimination of risks inherent in the contract. The premise here is that business is generally about generating revenue (and making profits), and that revenue and those profits are the supplier's reward for taking risks. Therefore, revenue arises as those risks are eliminated or mature.
- 4.10 The most obvious example in which this might be an appropriate measure of progress of the contract is when the risks taken on are at the core of the contract, as is the case with insurance and warranty activities. However, it might be the most appropriate measure of contract progress in other cases too.

By the increase in value of the goods created under the contract

- 4.11 A third possible measure of contract progress mentioned in paragraph 4.3 is increases in value of the good created. For example, progress under a contract could be measured by surveys of the value of the work performed.²¹
- 4.12 The authors mentioned in paragraph 4.4(a) that how the progress of the contract is measured can make a significant difference to the pattern of revenue recognised. Let us consider again an example discussed in Chapter 3.

The Swimming Pool

A customer enters into a contract that requires the supplier (a builder of swimming pools) to construct a swimming pool of a specified shape, size and depth in a specified location within his garden.

The supplier starts its work by moving various items of equipment into the customer's garden (Stage 1). Stage 2 will be to dig out the hole for the swimming pool. When it has dug a hole of the right shape, size and depth and in the right location, it stops digging and commences Stage 3: lining the hole and attaching various pumps to the hole and lining.

Let us assume that the supplier has completed Stage 1 and is looking to apply a continuous approach to determine the amount of revenue to be recognised. If it measures progress by reference to costs incurred, revenue will be deemed to have arisen. However, if progress is being measured by reference to “increases in value of the goods created” the position is less clear. Some might argue that nothing of value has been created, so no revenue has arisen. However, others might argue that Stage 1 does involve the supplier in doing something of value—moving its equipment onto the site is a necessary step in order to fulfil the contract and is therefore something that the customer should value—so revenue arises during Stage 1.

The passage of time

- 4.13 Another possible measure of contract progress is the passage of time. Such a measure is likely to be an appropriate measure only when the contract is for a fixed duration and appears to involve a constant amount of performance from the supplier. A rental or hire agreement will usually be such a contract. For example, if a supplier agrees to hire a room to a customer for a ten day period, using the passage of time to measure the progress of the contract would result in the supplier recognising one tenth of the total contract revenue each day. (Of course, a number of other approaches would produce that same result.)
- 4.14 It does not follow however that the passage of time will always be the most appropriate measure for a contract of a fixed duration. For example, if the supplier agrees to rent a car to a customer for a ten day period in exchange for a total rent that will be determined by reference to the mileage driven, simply allocating that rent by reference to the passage of time is unlikely to be appropriate.

²¹ We explained in paragraph 4.4(c) that some measures of progress are output-oriented. This measure is an example of that. In theory the supplier could ask the customer what it considers to be the value of the goods created, but in practice the supplier would use its own estimate or a third-party valuer will be used. However, the objective will always be to measure how far the supplier has progressed through the contract.

Disaggregating a contract when applying the continuous approach

- 4.15 In our discussion of critical event approaches, we started by considering a revenue recognition approach (Approach A) that did not disaggregate contracts at all; revenue arose only when the contract had been performed in full. Under that approach, revenue was a measure of contract completion. We then considered a series of modifications to Approach A, each one involving more disaggregation than the one before. Bearing in mind that the continuous approach involves in effect the most extreme disaggregation possible, it would seem at first sight that any other form of disaggregation is not necessary under the continuous approach
- 4.16 However, the authors think disaggregation might still be necessary, although probably not to anywhere near the same extent. There are several reasons why this is the case. For example, it might be necessary to disaggregate the contract because it is difficult to find a measure of contract progress that is suitable for all parts of the contract. Where that is the case, disaggregating the contract could enable different measures of progress to be used for different parts of the contract. In this case, disaggregation ought not to be a huge problem because it should simply follow the difference in measures of progress.
- 4.17 Disaggregation might also be necessary if significantly different profit margins are being earned on different parts of a contract.
- 4.18 Disaggregation may also be necessary for presentation reasons. For example, one of the examples first mentioned in paragraph 3.4(c) was the construction of a bridge:

The Bridge

A customer enters into a contract with the supplier (a construction company) that requires the supplier to build a bridge to the customer's design and specification. The contract envisages that the bridge will take three years to complete.

Assume that that example is modified:

The Bridge—A modified example

In the Bridge example we have been using to date, the contract deals only with the construction of the bridge. Assume now that the contract also deals with the planning and design of the bridge.

In this example, it might be necessary for the supplier to present disaggregated information about its revenue, showing the amount generated, say, by planning activities, design activities and construction activities separately. More generally, in many multiple-element arrangements, it might be necessary even under the continuous approach to disaggregate the total revenue arising to show the amount arising from each type of element. (The circumstances in which this might be so are outside the scope of this paper, although it is noted that disclosing separate revenue numbers for each type of revenue-generating activity might even be required under current IFRS.)

Reliability

- 4.19 In paragraphs 3.54-3.59 we discussed the so-called reversibility or derecognition of revenue; in other words, the risk that it might be necessary to recognise debit items in the revenue line in order to adjust previously recognised revenue amounts. As we explained in that discussion, some believe it is not appropriate to recognise an amount of revenue if subsequent adjustments to that amount remain a possibility. In their view, whilst that is still the case, the revenue number is not reliable.
- 4.20 Bearing that in mind, it is perhaps no surprise that some claim that the continuous approach does not lead to a reliable revenue number because, as it is not based on the existence of a claim against the customer, revenue amounts recognised might subsequently be adjusted.
- 4.21 In Chapter 3, the authors rejected the view that revenue numbers are not reliable if there remains a possibility that they might subsequently need to be adjusted. Although the Framework tells us that reliability is important, ‘reliable’ does not mean ‘no realistic possibility that restatement will be needed’. For that reason, the authors believe the continuous approach can lead to a reliable revenue number.
- 4.22 In the discussion in Chapter 3, we went on to say that, when developing a standard on revenue recognition, standard setters will need to take a view as to what degree of reliability and certainty is needed for the qualitative characteristics to be met and revenue to be recognised. In this context, it is worth noting that, in order to achieve a sufficient level of reliability, existing IAS 11 requires that the percentage-of-completion method shall be used only when the outcome of the construction contract can be estimated reliably. In a similar vein, a standard might insist that a continuous approach can be used only if the supplier expects the contract to be completed and is able to estimate the outcome reliably. In other words, although a claim against the customer does not need to exist at the balance sheet date, the supplier must have valid expectations regarding complete fulfilment, the existence eventually of a right to consideration, and the collectability of the consideration.²²

A general revenue recognition principle

- 4.23 The draft general recognition principle under the continuous approach would be:

Revenue arises as activity that reflects performance towards completion of a contract occurs.

²² The standard would presumably also have to explain what degrees of confidence the supplier needs to have, for example, “valid expectations regarding...the collectability of the consideration” and what the revenue implications are of the supplier ceasing to have those valid expectations part of the way through the contract. One possibility is that:

- (a) collectability of the arising claim against the customer must be assured; if the entity does not expect cash to be collected, no revenue should be recognised under the continuous approach.
- (b) if part of the way through the contract, significant doubts as to collectability arise, the entity should stop recognising revenue. However, it should not derecognise revenue already recognised; instead it should set up an allowance for doubtful accounts. That is because revenue recognised reflects performance, that is, activity under a contract. This activity had taken place, an asset had arisen and existed as long as the entity had valid expectations that collectability is ensured. Accordingly it is not reversed but rather impaired by sheer uncollectability of an arising claim.

The approach applied to various examples

4.24 To illustrate how the continuous approach would work, let us again consider the example transactions we have been using throughout our discussion of the various approaches being explored. It is a long time since we described them, so in the discussion below we have repeated without alteration or addition the descriptions given at the beginning of the paper.

4.25 The first example transaction is a simple sale of goods.

The Chair

A customer buys an already-made chair from the supplier, and takes it home in his car.

Under Approaches A and B, revenue will arise at the point at which the supplier hands over the chair. That would also be the case under Approach C, because there is no part-output. It would also be the case under Approach D (the continuous approach) because the contract progresses from commencement to completion instantly, so there are no intermediate steps at which to recognise some of the revenue.

4.26 The second example transaction involves the provision of a simple service.

The Washing Machine

A customer with a washing machine enters into a contract with a separate supplier (the plumber) that requires the supplier to connect the washing machine to the customer's existing plumbing and do all other things that are necessary to make the washing machine work.

Under Approaches A and B, revenue would arise at the point at which the supplier connects up the washing machine and ensures that it works. Under Approach C, if the work is not particularly specialised in nature, the contract would probably be disaggregated and revenue accounted for separately on each part-contract—although materiality considerations might make that unnecessary. Under Approach D revenue would in theory arise as work under the contract progresses. In this example it is likely that the supplier's work will take only an hour or so, so it is unlikely that for this transaction in practice the pattern of revenue recognised under Approach D will differ from Approaches A and B—although, in a similar contract that is of a longer duration, the pattern would differ.

4.27 The third example is another service transaction, albeit one of longer duration.

The Cleaner

A customer enters into a contract that requires the supplier (the cleaner) to visit his office every work day evening for a year and carry out on each of those visits an identical set of cleaning tasks.

What we said in the context of the Washing Machine example about Approaches A and B applies equally here. However, in this example under Approach C revenue would be recognised on a daily basis and the amount recognised each day would be the same. That would also be the case under Approach D.

4.28 The fourth example is a long-term construction contract.

The Bridge

A customer enters into a contract with the supplier (a construction company) that requires the supplier to build a bridge to the customer's design and specification. The contract envisages that the bridge will take three years to complete.

Under Approach A, no revenue would arise until the bridge has been completed. Under Approach B, that would also probably be the case, unless the contract was unusual in requiring there to be, at certain specified stages in the contract, unconditional customer acceptance of the work carried out to date. Under Approach C, again no revenue would arise until the bridge has been completed. Thus, under the critical events approach, the supplier can have a binding contract with a customer and be busy all year fulfilling that contract, yet still not recognise any revenue.

In contrast, under the continuous approach revenue would be recognised over the course of the contract as its performance progresses (assuming the supplier expects the contract to be completed and is able to estimate the contract's outcome reliably). Regardless of which measure of progress is used, the result will be significantly different from the revenue pattern recognised under the critical events approach. If the supplier has a binding contract with a customer and has been busy all year fulfilling that contract, its revenue number will reflect the level of that activity. Many claim this as the major advantage of the continuous approach; it reflects the economic activity the supplier has carried out pursuant to contracts with customers.

4.29 The next example is a multiple-element arrangement.

The Computer

A customer orders from the supplier a particular specification of computer along with a specified package of off-the-shelf software. The supplier is required to supply and deliver the computer with the software already loaded, connect up all the wires and make sure everything works, and provide the customer with ten hours of tuition on how best to use the computer and its software.

NB. This is assumed to be a multiple-element arrangement that has at least two components: the supply, delivery and set-up of the computer and software; and the tuition.

Under Approach A, no revenue would arise until the contract has been fully completed. Under Approach B it would depend on whether the contract required the customer to unconditionally accept the supplier's work at various stages prior to contract completion; under the typical contract (which would not require unconditional acceptance until the end) the effect would be the same as Approach A. Under Approach C the contract would be disaggregated, with revenue being recognised at the end of each part-contract.

Under Approach D, revenue would again be recognised as the contract progresses (assuming the supplier expects the contract to be completed and is able to estimate the contract's outcome reliably). Exactly what the revenue recognition pattern would be would depend on how progress is measured, and also on whether, under the continuous approach, the contract has been disaggregated.

4.30 It would be useful at this point to explore a further multiple-element arrangement.

The IT company

A supplier agrees to supply and deliver a computer hardware system to a customer and to install on that system (after it has been delivered) some software that has been specially tailored to that system and customer. The computer hardware represents 95% of the value of the contract and the software just 5%, although the hardware cannot be used unless and until the software has been installed.

The position under Approaches A and B is exactly the same as for the previous example. In other words, revenue would not be recognised until contract completion under Approach A or (assuming a typical contract) Approach B.

Under Approach C, the position would depend on whether any other market participants could provide and install the bespoke software. If they could not, the position would be as for Approaches A and B (ie no revenue recognised until contract completion) but, if they could, the contract would be broken down into two part-contracts—the supply and delivery of the hardware and the installation of the software—and revenue would be recognised on each part-contract separately when that part-contract has been fulfilled.

Under the continuous approach, such multiple element arrangements would lose some of their complexity. In the example, if the software is not installed, the system cannot be used and this factor plays an important role in all the critical event approaches we are considering. It also plays an important role in the continuous approach, because revenue cannot be recognised if the supplier does not expect the contract to be completed. However, the difference is that, as long as that expectation exists, under the continuous approach revenue will be recognised (subject as always to the supplier being able to estimate the contract's outcome reliably) as the contract progresses.

The asset/liability model

- 4.31 One of the principles on which the paper is based is that the revenue recognition approach adopted must be an asset/liability approach model; in other words, that revenue should arise only if there has been an increase in assets or a decrease in liabilities. It is therefore necessary to consider whether the continuous approach we have been discussing is consistent with such a model. This is particularly important bearing in mind that some argue that the percentage-of-completion approach described in IAS 11 is not an asset/liability approach.
- 4.32 As the biggest differences compared to the critical events approach arise when the continuous approach is applied to construction contracts and multiple-element arrangements, we will focus on those types of transaction.
- 4.33 In the bridge example, the issue is whether, as the contract progresses, there is an increase in assets or decrease in liabilities. Once the contract has been signed but before work has started, the supplier will just have the contract. That contract will be fully unperformed executory by both parties. Then the supplier will start performing and that fully unperformed contract will become a contract that comprises parts that have been performed by the supplier (it has performed but the customer has not paid

Revenue Recognition—A European Contribution

for that performance yet) and parts that remain equally unperformed by both parties. Under existing accounting conventions, we do not generally account for the rights that will arise under an equally unperformed executory contract separately from the obligations that arise, but we do account separately for any performed parts. Thus, the implications of the supplier's partial performance need to be accounted for.

- 4.34 In the discussion above it is a bit difficult to see exactly what those implications are, so we will change the example a little so that they become more apparent. Assume the customer pays the supplier in full at the beginning of the contract for the work it is contracted to carry out. In this example, at the beginning of the contract the supplier will have a liability. There are different views as to what the liability represents.
- (a) Some believe it represents an obligation to perform under the contract. As the supplier performs and the contract progresses, its performance obligation—and therefore under this view the liability recognised—will decrease. The authors believe that it is reasonable to conclude that, if there is an increase in assets or decrease in liabilities as the contract progresses when payment has been received in advance, there will also be an increase/decrease when payment has not been received in advance.
 - (b) Some believe that the liability recognised is actually a liability to return the payment received in advance of performance. They argue that that liability will not decrease with every progression in the contract; it will decrease only when the effect of the supplier's performance has been to reduce the customer's right to demand full repayment. Some argue that these reductions will occur only when the supplier's performance results in a right to consideration, but there is no agreement on this and, for example, some others argue that it will be when it results in the items of part-output that have value to the customer. In effect, therefore, those holding this view of the liability are questioning whether the continuous approach is an asset/liability approach.
- 4.35 Another way of looking at the asset/liability issue is to say that, as the supplier moves closer towards complete fulfilment of the contract, it improves its situation relative to its position at contract initiation. This improvement is observable and valuable, and indicates that there has been an increase in assets or a decrease in liabilities.
- (a) If the supplier seeks somebody to take over the contract, the value of the performance obligation (liability) for the entity taking over the construction will be lower the more the contract has progressed (unless there has been poor performance).
 - (b) Assume there are two entities in exactly the same economic situation that have both entered into an identical long-term construction contract that is expected to be completed and to be profitable, and that, the only difference between them is that one has only just signed the contract, whilst the other has half finished the bridge. Although that second entity might not yet have a claim against the customer, a third party would pay more for that entity. It should be noted however that the difference in price only shows that there has been an increase in assets or a decrease in liabilities; it does not necessarily represent the value of that increase/decrease.

Chapter 4—When does revenue arise? (Part 2—Continuous approaches)

- 4.36 But what is the nature of the increase in assets or decrease in liabilities that arises? It is clear that it is not often a right to consideration, nor is it usually some other sort of current claim on the customer.
- (a) Some argue that the asset that arises because of the contract progressing is more like work in progress.
 - (b) Some others argue that it is more like a receivable than to work-in-progress. They point to IAS 11, which introduces the notion of a ‘due from customer’ balance. This type of asset reflects costs incurred while fulfilling a contract plus a related profit margin (IAS 11.43). However, the word ‘due’ seems to imply that it is some sort of current claim against the customer, yet often there will not be such a claim.
- 4.37 Although this is an interesting debate, it is not one that this paper needs to resolve; it is sufficient for there to be an increase in assets or decrease in liabilities. We will therefore refer to the asset simply as a ‘contract asset’.

Discussion

- 4.38 The discussion in Chapter 3 started by focusing on a basic critical event approach (Approach A), modified that approach to correct an over-simplification (Approach B) and then explored several modifications relating to the disaggregation of the contract (principally Approach C). In this chapter we have been exploring an approach that we introduced as being a critical event approach that involves a very extreme form of disaggregation, but is in fact quite different from the critical event approach in a number of respects (Approach D, the continuous approach).
- 4.39 In particular, the critical event approaches (ie Approaches A to C) are based on the premise that revenue is what a supplier gets *when it has done* something it promised a customer it would do; the continuous approach is based on the premise that revenue is what a supplier gets *as it is doing* what it promised a customer it would do.
- 4.40 The intention when the authors started working on this paper was to develop a single revenue recognition principle that would be appropriate to apply to all transactions. The authors still believe, whichever principle is selected, it should be applied to all transactions. In their view it would be inappropriate to apply one principle to some transactions and a different principle to another set of transactions. Indeed, that is the position at the moment with IAS 11 adopting one principle and IAS 18 another—and it is the cause of many of the difficulties that currently exist.
- 4.41 The difference in the view taken of revenue that is described in paragraph 4.39 above is essentially the same as the difference of view highlighted back in paragraphs 2.25-2.27 when we were discussing what revenue is. There is no doubt that both views have their supporters, and the authors have come to realise that there is probably not one indisputably correct view. A choice needs to be made, and how one exercises that choice depends on how one views the key issues raised in the paper. We will return to this subject again in our concluding remarks in Chapter 5, but first we want to dig a little deeper into the continuous approach.

Further thoughts on the continuous approach

- 4.42 As the authors have worked on this paper and discussed its content with others, it has become clear that, although a version of the continuous approach has been used for years to account for construction contracts, if it is to be applied more widely it would be necessary to address a number of practical issues. Those issues do not appear to the authors to be insurmountable—although they have not attempted to solve them in this paper—but it does mean that more development work would be needed before the approach would be capable of being applied in all circumstances in a consistent manner. To be fair, the same is true of the critical event approaches.
- 4.43 However, bearing this in mind, we thought we would end this discussion of the continuous approach by introducing and exploring a series of new examples that highlight some of the practical implementation issues that arise and suggest how they might be resolved. All the examples involve the sale of an item of furniture, but the different fact patterns involved explore a key issue that arises under the continuous approach: if revenue is to be recognised continuously over the course of the contract as the contract progresses and the supplier performs, when exactly does the supplier perform?
- 4.44 It should be noted that, in all the examples, it is assumed that a good measure of contract progress is the supplier incurring cost. It is also assumed that the supplier expects the contract to be completed and that the expected outcome of the contract can be estimated reliably.

Example 1: The sale of furniture in stock, with immediate delivery

- 4.45 A supplier enters into a contract to sell an item of furniture to a customer. The furniture is in stock, and the supplier hands it over to the customer immediately on entering into the sales contract. Although the supplier acquired the furniture before the contract with the customer was entered into, revenue is not recognised earlier because, as explained in Chapter 2, revenue arises from activities undertaken by the supplier pursuant to a contract with a customer. Put another way, until the contract has been entered into, the supplier has not incurred any costs pursuant to the contract. However, on entering into the contract, the supplier immediately hands over the furniture, thus incurring 100% of the costs that are to be incurred under the contract. 100% of the revenue therefore arises at that same moment.

Example 2: The sale of furniture that is not in stock and has to be made

- 4.46 A supplier enters into a contract to sell and deliver an item of furniture to a customer. The furniture is not in stock and has to be made by the supplier. One could argue, as the sale of the furniture has taken place as soon as the contract is binding for both parties, so revenue should be recognised at that point. However, under the continuous approach, revenue is not recognised because a contract is signed; it is recognised as the supplier performs and the contract progresses. As the furniture is not in stock, there has been no performance and no progress at the contract point.
- 4.47 Instead, the supplier performs by making the furniture and the contract progresses as that production process moves towards completion. Revenue is recognised over the course of the production process.

Example 3: The sale of furniture in stock, with delivery in 90 days

- 4.48 A supplier enters into a contract to sell and deliver an item of furniture to a customer. Although the furniture is in stock, the customer asks for it to be delivered 90 days after he has bought the item.
- 4.49 As in Example 1, the contract involves a sale and a delivery, except in this example they do not happen at the same time so complete contract performance is not instantaneous. The delivery after 90 days that the customer has asked for means that the customer has in effect asked the supplier to store the furniture for 89 days, then deliver it. So the supplier will incur three sets of costs: the cost of the item of furniture, storage costs and delivery costs. Clearly the storage costs will be incurred over the storage period (ie days 1 to 89), and the delivery costs will be incurred as the furniture is being delivered on day 90. But when should the costs of the furniture be treated as incurred for the purposes of revenue recognition?
- (a) Some argue that the cost of the furniture should be treated as incurred at the point at which the furniture is sold. They argue that, in the transaction we are currently discussing, the sale might take place at the point the contract is entered into, but also might take place later—everything depends on the exact contractual terms involved.
 - (b) However, such a view of the transaction could result in some rather odd accounting results. For example, let us assume that the above view is correct. Let us also assume that the contractual terms suggest that the sale takes place shortly before delivery. It presumably would follow that the supplier is not providing a storage service (because the furniture is still the supplier's until day 90). Thus, under the continuous approach described, no revenue at all will arise until shortly before delivery. This contrasts with Example 2, where revenue arises during the supplier's production process. So, although in Example 3 the supplier has the furniture in its possession and is willing to hand it over there and then, it recognises the revenue later than in Example 2, where the furniture does not exist and has to be made. This does not make any sense.
 - (c) Those holding the view described in (a) might agree that "this does not make sense" but argue that the problem lies with Example 2, not Example 3. In particular, they might argue that the type of contract described in IAS 11 is a contract for services (construction services) and that is why, under IAS 11, the point at which the sale is made is not discussed; the services are 'sold' as they are provided. Example 2, on the other hand, is a contract for the sale of goods and in such a contract the supplier performs by selling the goods, not by producing them, and it cannot sell them until they have been produced.
 - (d) However, some would say the arguments used in (c)—the insistence that revenue recognition depends to a large extent on the point at which the sale takes place—are based on a way of looking at transactions that is different from the way the continuous approach looks at transactions.
- 4.50 Although this is a fascinating debate, it is not one the authors intend to reach a final conclusion on in this paper because the purpose of this section of the paper is merely to illustrate some of the issues that would need to be explored further to ensure that the continuous approach could be applied in all circumstances in a consistent

Revenue Recognition—A European Contribution

manner. However, in order to be able to discuss the examples described below, the authors have made a working assumption that they believe to be reasonable: when a continuous approach is being applied and progress is being measured by reference to the costs being incurred by the supplier, the cost of the goods sold are incurred by the supplier for revenue recognition purposes when the goods are in the supplier's possession and are available for collection and delivery.

- 4.51 Returning now to Example 3, applying the working assumption just described, the supplier will incur the cost of the furniture on entering into the contract, the storage costs over the next 89 days, and the delivery costs on day 90. The total revenue arising on the contract will be recognised over the contract as those costs are being incurred.
- 4.52 At first glance it may appear that the contract has been disaggregated into components: sale, storage and delivery. But that is not the case; revenue is simply being recognised on the contract as a whole as progress is made under the contract. To illustrate this, let us assume the total contract price the customer pays is €100, and that the cost of the goods sold is €70, the storage costs are €2 and costs of delivery are €3. Thus the cost of goods sold account for 93% of the total cost of the arrangement. By having the furniture in its possession and available at the time the contract is entered into, the supplier has performed this 93% of the contract and thus 93% of the total revenue has arisen. Then over the next 89 days it incurs the storage costs (which represent 3% of the total costs), so 3% of the total revenue is recognised over that period. On the 90th day the supplier delivers the furniture and thereby incurs the remaining 4% of the total contract cost. Revenue related to that is recognised accordingly.
- 4.53 Now let us consider a slight variation on this example. The facts are exactly as described above, except that the item of furniture involved is fungible (in other words, a number of identical items exist), although currently the supplier has only one of that particular piece of furniture available. Assume also that shortly after the transaction we have been considering the supplier enters into a contract with another customer to sell for immediate delivery another piece of the same item of furniture and that it fulfils that contract by delivering the one available item to that second customer. The supplier is happy to enter into this second contract and to fulfil it in the way it has because it expects to have a second item available in time for delivery to the first customer. However, by delivering the item to the second customer, the supplier's performance under the contract with the first customer is reduced from 93% complete to 0% complete. Consequently, the already recognised revenue for the transaction with the first customer needs to be 'reversed'. At the same time, however, revenue from the sale to the second customer is recognised.
- 4.54 The position would be the same were the item of furniture is destroyed (for example, by fire) before it is delivered to the customer.

Example 4: The sale of furniture that is to be delivered immediately by a sub-supplier

- 4.55 A supplier enters into a contract to sell and deliver an item of furniture to a customer. The supplier does not have the item of furniture ordered available, but its sub-supplier does. The supplier therefore needs to arrange for the item to be delivered by the sub-supplier to the supplier, then deliver it to the customer. This means that the supplier will incur two sets of costs: the cost of arranging for the furniture to be in its possession and available for delivery (which would comprise the cost of the furniture and the cost of delivery to the supplier), and the cost of delivery from the supplier to the customer.
- 4.56 Under the continuous approach, the supplier will incur the cost of arranging for the furniture to be in its possession and available for delivery when the furniture has been delivered by the sub-supplier to the supplier. Thus, the revenue reflecting the costs involved in progressing the contract to that stage will be recognised at that point, with the remainder of the revenue recognised as the furniture is delivered by the supplier to the customer.
- 4.57 Assume now that the example is modified and the supplier arranges for the sub-supplier to deliver the furniture directly to the customer. The accounting treatment would probably depend on what exactly are the supplier's performance obligations in this transaction (because it could for example be acting as some sort of agent for the sub-supplier) but, assuming the supplier is still selling the furniture to the customer and has merely simplified the delivery arrangements, under our working assumption revenue probably would not arise until the furniture has been delivered to the customer. That is because at no point previous to that was the furniture ever in the supplier's possession and available for immediate collection or delivery.

Example 5: The sale of furniture that has to be made and delivered by a sub-supplier

- 4.58 A supplier enters into a contract to sell and deliver an item of furniture to a customer. The item is not in the supplier's stock. Instead, it will need to buy the item from a sub-supplier, which will have to make the item first. The furniture will then be delivered by the sub-supplier to the supplier, which will then deliver it on to the customer.
- 4.59 One view of this transaction is that revenue cannot be recognised by the supplier over the period the item is being made by the sub-supplier because the supplier is not actually performing during that period—it is the sub-supplier that is performing. Under this view, a supplier that subcontracts a performance obligation will recognise revenue arising from that obligation later than one that does not subcontract it.
- 4.60 An alternative view would be that the contract *is* progressing because of the sub-supplier's work and that ought to mean that the supplier should be recognising revenue during that period. (The rationale here is that, as the sub-supplier's work progresses, revenue will arise for the sub-supplier; and, if the supplier's accounting is the 'mirror image' of the sub-supplier's, the supplier will be recognising expenses—and therefore revenue—as the sub-supplier's work progresses.) Under this view it would make no difference to the pattern of revenue recognition whether or not a performance obligation is subcontracted.
- 4.61 There are some practicality issues involved in applying the view described in the previous paragraph—for example, does the supplier know how the sub-supplier's

Revenue Recognition—A European Contribution

work is progressing—but some believe that it ought also to be a requirement that the supplier is somehow involved in the sub-supplier's production process, and that involvement would enable the supplier to have knowledge of the sub-supplier's progress. For example in the software industry, fulfilling a contract with a customer often involves parts fulfilled, produced or delivered by a third party. Sometimes the contractor (ie the supplier) even controls the production process. It could perhaps be argued that, if the supplier controls the production process and is able to measure its progress, revenue could for example be recognised according to the costs incurred by the third party. That is because the supplier performs by controlling the production process of the third party. (Of course, if such a view were to be pursued, it would be necessary to consider what is meant by the supplier 'controlling the production process' of the sub-supplier and how that could be distinguished from the supplier controlling the sub-controller.)

- 4.62 Some argue that this alternative view is supported by the principle of substance over form. Why should the revenue recognition be different depending on whether the seller performs by in-house production or by subcontracting a third party? On the other hand, some would argue that the substance of the two arrangements is different; when the supplier makes the furniture, it bears the risks and rewards arising from the production process but, if the sub-supplier makes the furniture, the supplier bears none of those risks. However, in the previous paragraph it was suggested that it was also necessary for the supplier to in some way control the sub-supplier's production process and, depending on exactly how this control requirement is defined, it could mean that the risks and rewards inherent in the production process do in fact rest with the supplier rather than the sub-supplier.
- 4.63 The authors could go on, but discussion above is sufficient to show that the continuous approach, whilst offering a solution for the conceptual inconsistencies that currently exist, also raises issues that the authors have not yet addressed. That does not mean that the continuous approach is not workable; merely that further work is needed. Indeed, almost all the methods discussed in this paper would need further work to make them operational and the authors believe there is no reason to believe that the continuous approach will prove any more 'troublesome' to operationalise than some of the other approaches discussed.

CHAPTER 5—CONCLUDING REMARKS

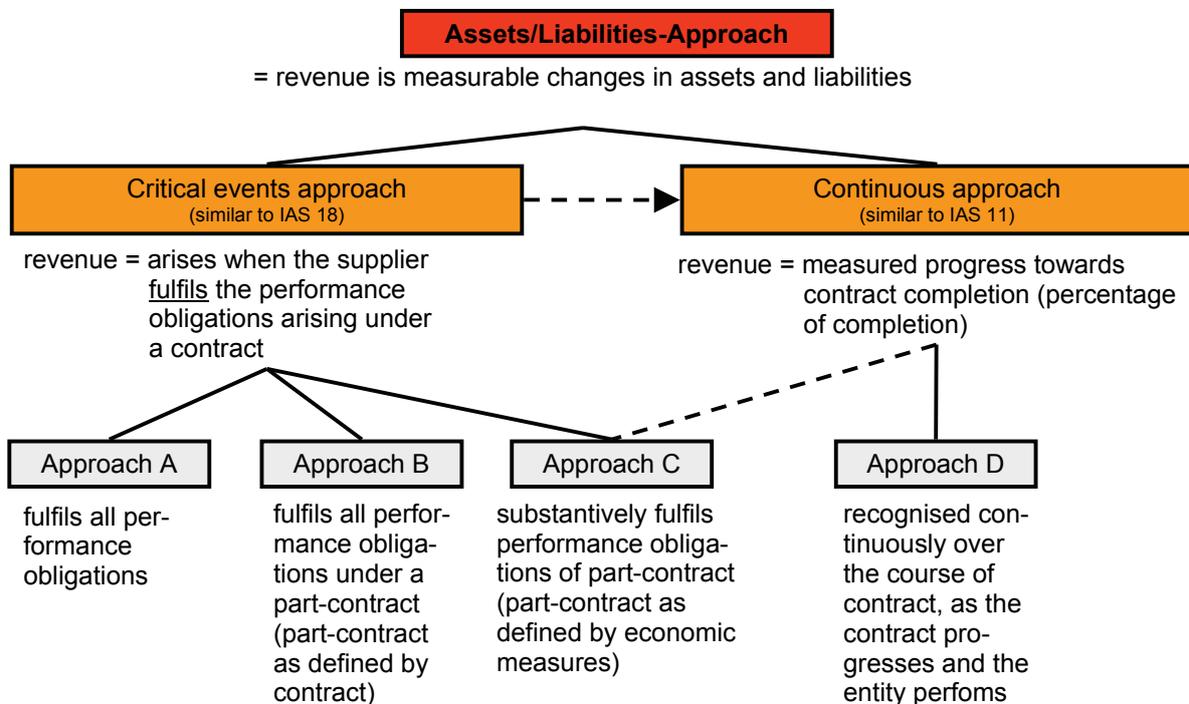
We started this paper by suggesting that, although it is sometimes claimed that everyone knows what revenue is and when it arises, on closer inspection it becomes clear that, except in the simplest of transactions, that is not actually the case. This paper is an attempt to discover what revenue is and when it arises. During the course of this work we have defined revenue and outlined four approaches that could be used to determine when revenue arises. In this chapter we summarise the conclusions reached, and compare and contrast the various approaches identified.

Critical event v continuous approaches

- 5.1 The paper has examined revenue recognition from first principles. It started (in Chapter 2) by discussing what revenue—the top-line of the income statement—is. Because we are applying the existing IASB Framework—and in particular the asset/liability approach—in this paper, we concluded that revenue is a particular type of increase in assets or decrease in liabilities. Based on our analysis of the framework amongst other things, we then went on to conclude:
- (a) Revenue is a gross notion. In other words, if a supplier sells an item for €10, making a profit of €2, it will be the €10 rather than the €2 that will be recognised as revenue.
 - (b) Revenue does not necessarily arise only from enforceable rights and obligations.
 - (c) Revenue is some sort of measure of activity undertaken pursuant to a contract with a customer. Therefore, without a contract there can be no revenue. Furthermore, revenue will not arise simply from entering into the contract, because at that point there will have been no activity undertaken by the supplier pursuant to the contract. However, exactly what “sort of measure of activity” revenue measures is not clear from our analysis; it could for example be a measure of completion activity (in other words, a measure of the things the supplier has completed) or a measure of activity towards completion (in other words, a measure of the things the supplier has done under the contract).
 - (d) Revenue does not necessarily involve an exchange.
 - (e) Revenue is something that arises in the course of ordinary activities.
- 5.2 As a result of this analysis and deduction, we ended up suggesting the following working definition of revenue:
- Revenue is the gross inflow of economic benefits that arises as an entity carries out activities pursuant to a contract with a customer.
- 5.3 The Framework tells us that revenue is recognised when it arises and can be measured reliably. We therefore asked (in Chapters 3 and 4) “when does revenue arise?” We identified two types of approach to the issue: the critical events approach (which was discussed in Chapter 3) and the continuous approach (which was discussed in Chapter 4).

Revenue Recognition—A European Contribution

- 5.4 Under the critical event approach, no revenue arises under a contract until a particular event or threshold in the contract (the critical event) has been reached; then all the revenue arises either on the critical event occurring or between that point and the end of the contract. Different critical events result in different critical event approaches, but all critical events have at their core performance obligations and ask whether the supplier has fulfilled specified performance obligations; has the supplier done what it was supposed to do? In other words, all critical event approaches are based on the basic premise that revenue is what a supplier gets when it has done something it promised to do for a customer—although they are based on different views as to what that ‘something’ should be. It follows that, under a critical events approach, revenue reflects fulfilment of all or just some of the performance obligations entered into through a contract with a customer. IAS 18 is based largely on a critical event approach. In the discussion below, Approaches A, B and C are the critical event approaches.
- 5.5 The continuous approach, on the other hand, does not focus specifically on the fulfillment of performance obligations; rather, it focuses on the progress of the contract and on the activities the supplier has and is undertaking to fulfil the contract and asks “what has the supplier done so far to fulfil the contract?” As a result, revenue arises continuously over the course of the contract as it progresses and the supplier performs. One example of the continuous approach is the percentage-of-completion method described in IAS 11. In the discussion below, Approach D is the continuous approach.
- 5.6 The various approaches explored in detail in the paper can be summarised as follows:



Chapter 5—Concluding remarks

- 5.7 Before summarising the nature, pros and cons of Approaches A to D, it is perhaps worth making a few comments about the pros and cons of critical event approaches and continuous approaches.
- (a) In paragraph 5.1(c), we said that, although revenue is some sort of measure of activity undertaken pursuant to a contract with a customer, there are different views as to what sort of activity revenue measures: it could for example be a measure of the things the supplier has completed or of the things the supplier has done under the contract. Critical event approaches measure “the things the supplier has completed”, and the continuous approach measures “the things the supplier has done under the contract”.
 - (b) Although the critical event approach can focus on the contract as a whole and take the view that revenue arises only when the supplier has fulfilled all its obligations under the contract (see Approach A), it is a widely held view that the approach works better if the contract is disaggregated into part-contracts. As the discussion in Chapter 3 shows, there are many different ways of disaggregating a contract under the critical events approach. However, it is difficult to find a disaggregation approach that is both supportable from a conceptual point of view and also simple. The continuous approach, on the other hand, does not rely on disaggregation to anywhere near the same extent and therefore tends to be less complex than the critical event approach.
 - (c) The orientation of the two approaches tends to be different. Because the critical event approaches focus on whether the supplier has done what it has promised, they tend to focus on the outputs that arise from the supplier’s activity (ie they tend to be output-oriented), which often means viewing things from the customer’s perspective. On the other hand, because the continuous approach focuses on the supplier’s progress in fulfilling the contract, the approach tends to be supplier-oriented.

Approach A: The complete contract fulfilment approach

- 5.8 Under Approach A, contracts are not disaggregated and revenue arises only when the supplier fulfils all the performance obligations arising under a contract with a customer; in other words, revenue arises only on complete contract fulfilment, when the supplier has done everything it promised its customer it would do.
- 5.9 Although Approach A is very straightforward, the authors believe it is based on a premise that is questionable: that, for revenue to arise, a right to consideration needs to have arisen and that will happen only on complete contract fulfilment. The authors believe that in many legal jurisdictions a right to consideration can arise prior to complete contract fulfilment. The most obvious example is where the contractual terms give rise to a right to consideration part way through the contract (see Approach B).
- 5.10 Putting that aside for a moment, Approach A would result in a similar revenue recognition pattern to most of the other approaches discussed in this paper when simple transactions that are completed almost immediately are involved. However, there will be significant differences as the transaction becomes more complex or involves performance over a longer period. For example, Approach A would result in no revenue being recognised even though the supplier may have both performed

substantially all of its obligations under the customer contract and a right to consideration.

Approach B: A modification of Approach A that focuses on rights to consideration

- 5.11 Approach B takes the basic idea underlying Approach A (that revenue is what the supplier receives for doing what it has promised to do) but recognises that the supplier can acquire rights to consideration before complete contract completion. So while Approach A focuses on the contract as a whole, Approach B focuses on the performance obligations that the contract requires the supplier to meet and that, when fulfilled, will result in rights to consideration. Thus, under Approach B, revenue arises when the supplier fulfils all the performance obligations arising under a part-contract with a customer; and a part-contract comprises one or more of the performance obligations required by the whole contract that, when fulfilled, will result in a right to consideration arising.)
- 5.12 An important difference between Approaches A and B is that Approach B accepts that it might be necessary to disaggregate (or divide up or unbundle) the contract with the customer into part-contracts. Approach B does that by reference to the points at which rights to consideration arise.
- 5.13 Another important difference is that Approach B is not based on the questionable premise that Approach A is based on (see paragraph 5.9. However, Approach B's underlying premise is also a concern for some. That premise is that revenue can arise only when rights to consideration arise, and they arise only as a result of the contractual terms. Although some believe this premise is right, others argue either or both that: The need for a right to consideration is the main determining factor in the two approaches described above. It could be argued that approaches based on rights to consideration are legalistic and, as a result, will have different implications in different legal jurisdictions.
- (a) Rights to consideration can arise in other circumstances.
 - (b) There are other increases in assets and decreases in liabilities—ie other than the acquisition of rights to consideration—that indicate that revenue has arisen.
- 5.14 During our discussion in Chapter 3 of Approaches A and B, we noted also that some would argue that another disadvantage of the approaches is that they do not take into account the fact that transactions can be complete in substance but not in form.
- 5.15 If we just focus on accounting effect, it is likely that Approach B will have the same accounting effect as Approach A for the vast majority of transactions. However, for some complex or long duration contracts that have contractual terms stipulating that rights of consideration arise before contract completion, revenue will be recognised earlier than under Approach A. However, Approach B would still result in no revenue being recognised even though the supplier has performed substantially all of its obligations under the customer contract unless a right to consideration has arisen.

Approach C: Disaggregating the contract by breaking it down into items of part-output that have value to the customer

- 5.16 Approach C takes a different approach from Approaches A and B by not focusing on rights to consideration at all. Under this approach, the contract is disaggregated into part-contracts, each of which comprises the work necessary to produce an item of part-output that has value to the customer; and revenue would then arise when a part-contract is fulfilled by the supplier.
- 5.17 The notion of 'value to the customer' could in theory be defined in different ways, although for the purposes of our discussion in Chapter 3 we said an item of part-output has value to the customer if either the customer can use it for its intended purpose or if it can be sold by the customer at a price that reflects its worth when used for that intended purpose. In other words a reference to a market place, directly or indirectly, is a common denominator and a necessary requirement for demonstrating that a part-output reflecting its intended purposes is usable or can be sold.
- 5.18 Although the authors believe this is the most promising of the critical event approaches discussed in detail, it is also the most complex and, as currently described, is also rather rules-based. Further work will therefore be needed if it is to be developed into a principles-based approach that can be operationalised and consistently applied without lots of additional guidance. On the other hand, the approach is not dissimilar to an approach that is already being used in the US, so it can be made operational.
- 5.19 For simple transactions, Approach C will have a similar accounting effect as Approaches A and B. However, as the contract becomes complex, differences will arise. For example, under Approach C it is likely that, in a multiple-element arrangement, revenue will arise as the supplier completes each element. However, the duration itself is unlikely to make a difference; for example, under Approach C it is unlikely that any revenue will arise on a long-term construction contract until the contract is completed (unless it is a multiple-element arrangement).

Approach D: The continuous approach

- 5.20 Approach D adopts a very different approach, which is no surprise because it adopts the continuous approach while the other approaches are critical event approaches. Under Approach D, revenue is recognised continuously over the course of the contract as the contract progresses and the supplier performs. In order to apply the approach, it will be necessary to identify the measure which best reflects progress of the contract. In Chapter 4, it is suggested that this measure could be:
- (a) as the supplier incurs the costs inherent in the contract;
 - (b) as the risks inherent in the transaction decrease or are eliminated by the supplier;
 - (c) as the value of the goods created under the contract increases; or
 - (d) with the passage of time.

Revenue Recognition—A European Contribution

- 5.21 Reliability is of course always an issue in accounting. However, noting that IAS 11 requires the outcome of the construction contract to be capable of being estimated reliably if the percentage-of-completion method is to be used, Chapter 4 suggests that any standard requiring the use of the continuous approach might insist on certain 'reliability' criteria also being met. The paper suggests those criteria might be that the supplier has valid expectations regarding:
- (a) complete contract fulfilment;
 - (b) the existence eventually of a right to consideration; and
 - (c) the collectability of the consideration.
- 5.22 Although reliability was not mentioned when Approaches A and B were being discussed, the authors did mention the subject when discussing Approach C and it might be that similar criteria to those described above would be appropriate in that context. Indeed, some would argue that criterion (c) should apply to all approaches; in their view revenue cannot arise when a supplier carries out activities for a customer with no expectation of being paid.
- 5.23 Under Approach D (and subject to reliability issues), revenue will generally arise at the same time as Approaches A to C for simple contracts that are fulfilled almost immediately. However, for more complex or longer duration contracts, Approach D is likely generally to result in revenue arising earlier than under the other approaches.

The approaches compared

- 5.24 In Chapter 1 the authors explained that one of the reasons for the current difficulties with revenue accounting is that the existing revenue standards are not based on a single revenue recognition principle. Instead, two principles are involved. One is the principle that underlies critical events approach, the other the principle that underlies the continuous approach. We argued then that, if we are to improve things, we need to develop a single revenue recognition principle that can be applied to all types of transactions and in all circumstances, and would produce high-quality accounting information. That principle would in particular need to address multiple-element arrangements better than existing standards.
- 5.25 With that in mind, the authors thought we should conclude our discussion by summarising some of the accounting effects of the approaches discussed so that the general applicability of the approaches can be considered.
- 5.26 First of all, let us consider the accounting that results when the approaches are applied to various types of commonly-seen transactions. (In the table below it is assumed that contract progress is measured by reference to the costs incurred by the supplier:

Chapter 5—Concluding remarks

	Critical events approaches	Continuous approach
Sale of goods with immediate delivery (ie Many types of small item/small volume retail transactions, including the Chair example)	All of the revenue arising on the transaction will arise immediately, as the contract is both entered into and fulfilled	All of the revenue arising on the transaction would arise immediately, as the contract is both entered into and fulfilled.
Sale of goods that are in stock with delivery at a later date. No storage service involved (ie many large item sale transactions)	No revenue will arise until the goods are delivered, at which point all of the revenue will arise.	Revenue <u>relating to the sale of goods</u> will arise immediately; and the revenue relating to the delivery being recognised on delivery.
Sale of goods that need to be manufactured by the supplier, with delivery at a later date. No storage service involved (ie many large item sale transactions, including the Cherrywood Table example).	It depends. Under Approaches A and B, no revenue will arise until the goods are delivered, at which point all of the revenue will arise. Under Approach C it is possible that revenue might arise at various points during the manufacturing process	Revenue relating to the goods sold will arise as the manufacturing process progresses; and the revenue relating to the delivery being recognised on delivery.
Services (ie The Cleaner and Washing Machine examples)	It depends. (a) If the services provided are repetitive (for example the Cleaner example), under Approach A revenue would not arise until the end of the contract; under Approach B depending on the contractual terms revenue might arise at regular intervals throughout the year; and under Approach C revenue would arise on a daily basis. (b) On the other hand, if the service provided is not repetitive (for example the Washing Machine example), under Approaches A and B revenue would not arise until the end of the contract; and under Approach C revenue would generally arise at the end of the contract unless, broadly speaking, the service being provided is non-specialised and could be broken down into separate elements, in which case revenue might arise as each element is completed	Revenue will arise as the service is being provided.
Services where the deliverable occurs at the end of the transaction and the transaction is not completed immediately (ie an	It depends. Under Approaches A and B, no revenue will arise until the deliverable has been delivered, at which point all of the revenue will arise. Under Approach C it is possible—though probably not very likely—that revenue might arise at various points before that.	Revenue will arise as the service is being provided.

Revenue Recognition—A European Contribution

expert legal opinion)		
Long term construction work (For example, the Bridge)	Under most contracts and most critical event approaches, no revenue will arise until construction has been completed, then it will all arise.	Revenue will arise as construction progresses.

5.27 The following becomes clear when looking at the table above:

- (a) For the simplest of sales transactions (ie small item/low volume sales that are immediately delivered)—which account for the majority of all revenue generating transactions—there is no difference in accounting under the different models.
- (b) However, as soon as some additional complexity is involved, differences emerge. For example, for a sale of goods transaction, under the critical events approach the principle is in effect that the revenue on the whole transaction arises when the goods are delivered. That would be the case regardless of whether the goods are in stock when the customer orders them and, if they are not in stock, when it is a matter of simply obtaining them from a sub-supplier or the supplier manufacturing them. Under the continuous approach, revenue would arise as the supplier performs, which would mean that only a small part of the revenue will arise on delivery; the vast majority of the revenue will arise earlier. When exactly that revenue will arise will depend on whether the goods are in stock and, if they are not, when the goods come into the supplier's possession and whether the supplier also manufactured them. Applying the continuous approach will in almost all cases result in revenue being deemed to have arisen earlier than under the critical event approaches, and the authors believe it will never involve revenue arising later.
- (c) A similar story applies when we consider service contracts. In the simplest example where the service takes only a moment to perform, all four approaches will have the same effect, but as the contract gets more complicated differences emerge, although in almost all cases revenue will be deemed to arise earlier under the continuous approach.
- (d) Finally, when we consider long-term construction contracts, the difference is obvious and fundamental; under the critical events approaches A, B and C, no revenue will, arise until the work is completed and under Approach D the position will be broadly as it is under existing IFRS. Adopting one of the critical event approaches described in detail in chapter 3 would therefore seem to involve rejecting the percentage of completion method and changing drastically the existing accounting for long term construction contracts. However, as was mentioned briefly in paragraph 3.72(a), there are variations of Approach C that would result in construction contracts being accounted for in a way that is similar to the existing accounting for long term construction contracts.

5.28 In paragraph 5.24 we said it is also important that any approach chosen should be able to address multiple-element arrangements better than existing standards. The authors believe that this means as a minimum that, if a multiple-element arrangement comprises elements that could just have easily been the subject of separate contracts, the revenue recognition approach adopted should not prevent revenue being recognised as each element is fulfilled.

Chapter 5—Concluding remarks

- (a) Approach A does not disaggregate a contract at all, and therefore would not meet this criterion.
- (b) Approach B would meet the criteria if the contractual terms were such that a right to consideration would arise as each element is completely, but would not otherwise.
- (c) Approaches C and D would however meet the criterion.

5.29 Some would argue that “dealing well” with multiple-element arrangements means more than simply allowing revenue to be recognised on elements that are independent of each other.

- (a) Generally speaking Approaches A and B are unlikely to be of any use here. However Approach C might be, because it disaggregates contracts into items of part-output that have value to the customer. As such, revenue can arise in certain circumstances on the completion of elements even if they are to some extent interdependent. It will depend on whether the output of the elements involved are “usable by the customer for their intended purpose” (see paragraph 3.65(a)) or “can be sold by the customer” for a price that reflects that intended use (see paragraph 3.65(b)). That is largely about how specialised the items of output are.
- (b) Approach D could be applied to multi element arrangements without disaggregation (assuming that one joint measure of progress is appropriate for all elements of the arrangement, and it is not considered necessary to disaggregate the contract for presentation purposes or because significantly different profit margins are being earned on different parts of the contract). The entire revenue would be allocated based on this joint measure of performance towards completion of the entire arrangement. If, for example, progress is measured according to costs incurred, revenue for performance under the contract arises as costs are incurred. Thus, in a very simple way one avoids the problem of disaggregating a contract into elements to be accounted for separately.

However, even if disaggregation is necessary, the discussion in the paper suggests that it would in most cases be a much less complex exercise than disaggregation under many critical event approaches.

Some final comments

5.30 The key test of any proposed accounting solution is its usefulness to users of the financial statements. This paper has mentioned several times that some think that revenue should be a measure of completion activity and some that it should be a measure of activity towards completion. The critical events approaches discussed in detail in chapter 3 generally focus on the former, and the continuous approach on the latter. Some would argue that this issue was considered during the development of IAS 11 and at that time the conclusion was reached that recognising revenue only at the end of a long-term construction contract did not give users the information that they wanted. What is needed, they would argue, is an approach to revenue recognition that results in revenue being recognised as the reporting entity’s

Revenue Recognition—A European Contribution

performance progresses—and the approach that does that most effectively is the continuous approach.

- 5.31 The authors also said that it was very important that a single approach should be identified that could be applied in all circumstances. Some would argue that the discussion in paragraphs 5.26-5.27 shows that, although the critical event approaches described in detail in chapter 3 do not work well for long-term construction contracts, the continuous approach seems to work well for all types of transaction.
- 5.32 We also said it is important that the approach chosen should be able to deal well with multiple-element arrangements. We discussed this in paragraphs 5.28 and 5.29 and concluded that Approaches C and D probably dealt best with such transactions, although some believe that Approach D would be the easier to apply.
- 5.33 Bearing all this in mind, the DRSC has concluded that a future revenue recognition regime should be based on the continuous approach.
- 5.34 EFRAG and the CNC on the other hand have decided not to state a preference at this stage in the debate.

APPENDICES

APPENDIX I—LIST OF ACKNOWLEDGEMENTS

- I.1 This discussion paper has been prepared by a staff team working jointly for the Deutsches Rechnungslegungs Standards Committee (DRSC, or German standard-setter) and the Technical Expert Group of EFRAG (EFRAG). That staff team comprised, from the DRSC's staff, Dr. Mareike Kühne and, from EFRAG's staff, Reinhard Biebel (until May 2006), Paul Ebling (from October 2005) and Sigvard Heurlin.
- I.2 During the development of the paper, the authors have benefited significantly from the research, analysis and advice of Professor Dr Jens Wüstemann and Dipl.-Kffr Sonja Kierzek of Mannheim University in Germany and the authors would like to take this opportunity to thank them both for their valuable and substantial contribution to the project.
- I.3 The authors also placed considerable reliance on the analysis and advice of the joint DRSC/EFRAG Revenue Recognition Working Group, whose members comprised:
- Prof. Klaus Pohle (DRSC) (until January 2006)
 - Reinhard Biebel (EFRAG) (until May 2006)
 - Paul Ebling (EFRAG) (from October 2005)
 - Jerome Chevy (French CNC)
 - Stig Enevoldsen (EFRAG)
 - Prof. Begoña Giner (EFRAG) (until April 2005)
 - Prof. Sven Hayn (DRSC)
 - Sigvard Heurlin (EFRAG)
 - Dipl.-Kffr Sonja Kierzek
 - Dr. Mareike Kühne (DRSC)
 - Andrew Lennard (UK ASB)
 - Martin Noordzij (DASB)
 - Patrick Petit (French CNC) (until October 2006)
 - Prof. Dr Jens Wüstemann
- I.4 However, as the final decision as to the content of the paper lay with the DRSC and EFRAG, the paper does not necessarily represent the views of Professor Dr Jens Wüstemann, Dipl.-Kffr Sonja Kierzek or the other members of the Working Group.

APPENDIX II—THE EXISTING LITERATURE ON REVENUE ACCOUNTING

The IASB's literature

II.1 Currently, two IFRSs deal with revenue accounting issues:

- (a) IAS 18 *Revenue*, which applies to sales of goods, the rendering of services, and the use by others of assets of the reporting entity that yield interest, royalties and dividends;²³ and
- (b) IAS 11 *Construction Contracts*, which applies just to construction contracts. IAS 11 defines a construction contract as "a contract specifically negotiated for the construction of an asset or a combination of assets that are closely interrelated or interdependent in terms of their design, technology and function or their ultimate purpose or use."²⁴

II.2 This appendix briefly summarises IASs 11 and 18 and highlights aspects of them that are causing problems from a conceptual point of view and in practice.

IAS 18—Sales of goods

II.3 IAS 18.14 states that:

Revenue from the sale of goods shall be recognised when all the following conditions have been satisfied:

- (a) the entity has transferred to the buyer the significant risks and rewards of ownership of the goods;
- (b) the entity retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
- (c) the amount of revenue can be measured reliably;
- (d) it is probable that the economic benefits associated with the transaction will flow to the entity; and
- (e) the costs incurred or to be incurred in respect of the transaction can be measured reliably.

²³ IAS 18.5 explains that the use by others of entity assets gives rise to revenue in the form of:

- (a) interest—charges for the use of cash or cash equivalents or amounts due to the entity;
- (b) royalties—charges for the use of long-term assets of the entity, for example, patents, trademarks, copyrights and computer software; and
- (c) dividends—distributions of profits to holders of equity investments in proportion to their holdings of a particular class of capital.

²⁴ Currently, the IFRIC is proposing (in IFRIC D21 *Real Estate Sales*) to clarify IAS 11 to make it clear that, at least where real estate is involved, IAS 11 applies only to contracts for construction *services*; sales should be accounted for in accordance with IAS 18.

Appendix II—The existing literature on revenue accounting

- II.4 This is often characterised as requiring revenue to be recognised, subject to the reliability issues described in (c)-(e), at the point at which the goods are sold. One of the reasons that IAS 18 is criticised is because this principle appears not to be applied in a number of the examples set out in the standard's appendix. Those examples state that revenue should be recognised on delivery even though there is no suggestion in the examples that delivery is the point at which substantially all the risks and rewards of ownership are transferred.

IAS 18—Rendering of services

- II.5 IAS 18 also deals with the revenue that arises on rendering a service. In particular, IAS 18.20 states that:

When the outcome of a transaction involving the rendering of services can be estimated reliably, revenue associated with the transaction shall be recognised by reference to the stage of completion of the transaction at the balance sheet date. The outcome of a transaction can be estimated reliably when all the following conditions are satisfied:

- (a) the amount of revenue can be measured reliably;
 - (b) it is probable that the economic benefits associated with the transaction will flow to the entity;
 - (c) the stage of completion of the transaction at the balance sheet date can be measured reliably; and
 - (d) the costs incurred for the transaction and the costs to complete the transaction can be measured reliably.
- II.6 In other words, and subject to certain reliability issues, for services revenue is to be recognised as the work specified in the contract is being performed.
- II.7 Thus, the revenue recognition principle for services is not the same as the revenue recognition principle for sales of goods. Some have suggested that this is a problem because, when the contract for services involves a deliverable that occurs at the end of the cycle (in other words, where what is important to the customer is the end result), the service contract will be economically very similar to sales of goods and should therefore attract the same accounting treatment. Yet, under existing standards, they will be accounted for very differently. An example of a contract for services in which the deliverable occurs at the end of the cycle is a contract for the services of an expert witness. The expert is engaged by its client to provide an opinion, not to provide a partial opinion.

IAS 11—Construction contracts

- II.8 IAS 11.22 states that, "when the outcome of a construction contract can be estimated reliably, contract revenue and contract costs associated with the construction contract shall be recognised as revenue and expenses respectively by reference to the stage of completion of the contract activity at the balance sheet date." IAS 11.25 continues: "Under this method, contract revenue is matched with the contract costs incurred in reaching the stage of completion, resulting in the reporting of revenue, expenses and profit which can be attributed to the proportion of work completed." In other words, the costs incurred on the contract are recognised immediately in the income

Revenue Recognition—A European Contribution

statement and an amount of revenue appropriate for that stage of completion is also recognised. IAS 11.32 states : “When the outcome of a construction contract cannot be estimated reliably:

- (a) revenue shall be recognised only to the extent of contract costs incurred that it is probable will be recoverable; and
- (b) contract costs shall be recognised as an expense in the period in which they are incurred. “

Thus, when it is not possible to estimate reliably the outcome of a contract, the percentage of completion method is not used for revenue recognition. Instead revenue is recognised only to the extent of contract costs incurred that are expected to be recoverable. To the extent that contract costs are not expected to be recoverable, contract revenue is not recognised and contract costs are expensed as incurred.

- II.9 IAS 11.30 explains that the stage of completion of a contract may be determined in a variety of ways, and that the entity should use a method that measures reliably the work performed.

“Depending on the nature of the contract, the methods may include:

- (a) the proportion that contract costs incurred for work performed to date bear to the estimated total contract costs;
- (b) surveys of work performed; or
- (c) completion of a physical proportion of the contract work.

Progress payments and advances received from customers often do not reflect the work performed.”

- II.10 In other words, in the case of construction contracts, revenue is recognised—subject to certain reliability tests—as the work necessary to complete the contract is being performed, and the entity is free to use whatever measure of the work being performed seems reliable.

- II.11 Although this approach is almost identical to IAS 18’s approach for contracts for services, it appears very different from the approach adopted by IAS 18 for sales of goods. That is a problem because there is sometimes very little difference in substance between a sale of goods (accounted for under IAS 18) from a construction contract (accounted for under IAS 11). Consider the following example:

The Cherrywood Table

An individual walks into a furniture shop, sees an oak table, and enters into a contract with the shop for a table of the same design as the oak table but made in cherrywood to be delivered to their house in three months' time.

- (a) Although IAS 18 does not define ‘a contract for the sale of goods’, IAS 11.3 defines a construction contract as “a contract specifically negotiated for the construction of an asset or a combination of assets that are closely interrelated

Appendix II—The existing literature on revenue accounting

or interdependent in terms of their design, technology and function or their ultimate purpose or use.” It follows that, if the transaction is exactly as described, it would probably not be a construction contract because there has been no discussion between the customer and supplier as to whether there is a cherrywood table of the required design in stock or whether it has to be made, and therefore the contract will not have been “specifically negotiated *for the construction of an asset*”. The contract would therefore probably be a contract for a sale of goods. The principle in IAS 18—that revenue is recognised at point of sale—would therefore be applied.

- (b) However, it could perhaps be argued that, had the supplier explained to the customer that the table being ordered was not in stock and would have to be made specially, the contract might then have been for the construction (and delivery) of an asset and therefore a construction contract. If that were the case, the principle in IAS 11—that revenue should be recognised as the work is being performed—would be applied.

In other words, even though there is not a difference of substance between (a) and (b), the accounting would be very different.²⁵

Multiple-element arrangements

II.12 Another difficulty with the existing standards is that they do not deal comprehensively with some of the newer types of transaction that arise.

II.13 For example, multiple-element arrangements. IAS 18.13 states that:

“...In certain circumstances, it is necessary to apply the recognition criteria to the separately identifiable components of a single transaction in order to reflect the substance of the transaction. For example, when the selling price of a product includes an identifiable amount for subsequent servicing, that amount is deferred and recognised as revenue over the period during which the service is performed. Conversely, the recognition criteria are applied to two or more transactions together when they are linked in such a way that the commercial effect cannot be understood without reference to IAS 18 the series of transactions as a whole. For example, an entity may sell goods and, at the same time, enter into a separate agreement to repurchase the goods at a later date, thus negating the substantive effect of the transaction; in such a case, the two transactions are dealt with together.”

II.14 This requirement is supplemented with a few simple examples, but considered as a whole IAS 18 does not provide much useful guidance on when to disaggregate a contract nor on measuring the revenue attached to each element.

II.15 Recently, two IFRIC Interpretations have been issued that provide some guidance on the disaggregation of multiple-element arrangements.

- (a) IFRIC 12 *Service Concession Arrangements* requires the construction or upgrade services to be provided under a service concession arrangement to be treated as one element and any operation services to be treated as a second

²⁵ This is the issue that the IFRIC is proposing to address, at least for real estate sales (see IFRIC D21 *Real Estate Sales*). In D21 the IFRIC argues that the difference between IAS 11 and IAS 18 is that the former applies to contracts for (construction) services and the latter to contracts for sales of goods, so there is a difference of substance.

Revenue Recognition—A European Contribution

element. (The construction or upgrade services are then accounted for under IAS 11, whilst the operation services are accounted for under IAS 18.) The IFRIC explained its rationale in paragraph BC31:

The IFRIC noted that [IAS 18](#) requires its recognition criteria to be applied separately to identifiable components of a single transaction in order to reflect the substance of the transaction. For example, when the selling price of a product includes an identifiable amount for subsequent servicing, that amount is deferred and is recognised as revenue over the period during which the service is performed. The IFRIC concluded that this requirement was relevant to service arrangements within the scope of the Interpretation. Arrangements within the scope of the Interpretation involve an operator providing more than one service, ie construction or upgrade services, and operation services. Although the contract for each service is generally negotiated as a single contract, its terms call for separate phases or elements because each separate phase or element has its own distinct skills, requirements and risks. ...

- (b) IFRIC 13 *Customer Loyalty Programmes* requires an entity to account for award credits as a separately identifiable component of the initial sales transaction. (For example, if an airline sells an airline ticket with air miles attached, the transaction is treated as having two elements; the sale of an airline ticket and the sale of certain rights in respect of a future purchase of an airline ticket.) To justify this requirement, the IFRIC first explains that award credits granted to a customer as a result of a sales transaction are in effect sold to the customer (ie they are not a marketing expense). Then the IFRIC explains that:

Because loyalty awards are not delivered to the customer at the same time as the other goods or services, it is necessary to divide the initial sales into components and apply the recognition criteria separately to each component in order to reflect the substance of the transaction.

These two recent interpretations do not therefore set out a framework that can be applied to all types of multiple-element arrangement; rather, they deal only with two specific types and provide guidance that will not necessarily be of assistance in other circumstances.

Concluding comments

- II.16 In other words, the existing IASB's revenue material is not internally consistent and is also incomplete. Furthermore, as there are two different and competing principles underlying the material, it is difficult for users of IFRS to know how best to extrapolate the existing material. The existence of two very different principles also causes 'border issues', with transactions that are in substance the same falling either side of the border.
- II.17 It is no surprise therefore that the existing material has proved inadequate in resolving complex revenue recognition issues.

US literature

- II.18 Some companies have responded to the problems described above by looking to US GAAP. The US material is set out in a series of pronouncements issued by half-a-dozen or so different bodies and the existence of so many pronouncements, rather

Appendix II—The existing literature on revenue accounting

than a comprehensive standard, is itself a problem. Those pronouncements include, for example:

- *SAB 104 Revenue Recognition*
- *SFAS 45 Accounting for Franchise Fee Revenue*
- *SFAS 48 Revenue Recognition When Right of Return Exists*
- *SFAS 49 Accounting for Product Financing Arrangements*
- *APB 10 Omnibus Opinion*
- *ARB 45 Long-Term Construction-Type Contracts*
- *EITF 85-9 Revenue Recognition on Options to Purchase Stock of Another Entity*
- *EITF 87-10 Revenue Recognition by Television “Barter” Syndicators*
- *EITF 91-6 Revenue Recognition on Long-Term Power Sales Contracts*
- *EITF 95-1 Revenue Recognition on Sales with a Guaranteed Minimum Resale Value*
- *EITF 95-4 Revenue Recognition on Equipment Sold and Subsequently Repurchased Subject to an Operating Lease*
- *EITF 96-17 Revenue Recognition under Long-Term Power Sales Contracts*
- *EITF 00-21 Revenue Arrangements with Multiple Deliverables*
- *EITF 00-22 Accounting for “Points” and Certain other Time-Based or Volume-Based Sales Incentive Offers, and Offers for Free Products or Services to Be Delivered in the Future*
- *EITF 00-24 Revenue Recognition: Sales Arrangements That include Specified-Price Trade-in Rights*
- *EITF 01-4 Accounting for Sales of Fractional Interests in Equipment*
- *SOP 81-1 Accounting for Performance of Construction-Type and Certain Production-Type Contracts*
- *SOP 97-2 Software Revenue Recognition*²⁶

II.19 There is also a significant gap between the broad conceptual guidance in the FASB’s Concepts Statements and the detailed guidance in the authoritative literature. Most of the authoritative literature provides industry or transaction-specific implementation

²⁶ SOP 97-2 has been changed by SOP 98-4 Deferral of the Effective Date of a Provision of SOP 97-2, *Software Revenue Recognition* and SOP 98-9 Modification of SOP 97-2, *Software Revenue Recognition*.

Revenue Recognition—A European Contribution

guidance, and it has been developed largely on an ad hoc basis and issued in numerous pronouncements with differing degrees of authority. Each focuses on a specific practice problem and has a narrow scope, and the guidance is not always consistent across pronouncements.

- II.20 The SEC was seeking to fill that gap when it issued SAB No. 101 *Revenue Recognition in Financial Statements* in December 1999, and the companion document *Revenue Recognition in Financial Statements—Frequently Asked Questions and Answers* (issued in October 2000). SAB 101 was superseded by SAB 104 *Revenue Recognition* in December 2003.
- II.21 SAB 104 argues that the four basic criteria for revenue recognition in AICPA SOP 97-2 'Software Revenue Recognition' should be a foundation for all basic revenue recognition principles. SAB 104 takes the view that revenue should not be recognised until it is realised or realisable and earned. SAB 104 concludes that this is the case when the following criteria are met:
- (a) Persuasive evidence of an arrangement exists,
 - (b) Delivery has occurred or services have been rendered,
 - (c) The supplier's price to the buyer is fixed or determinable, and
 - (d) Collectability is reasonably assured.
- II.22 The problem with an approach that focuses on the earnings process is that it can result in recognition of 'deferred debits' and 'deferred credits' that are not assets and liabilities as defined in the Framework. Furthermore there can be different views on what constitutes earnings and when an earnings process is completed. For these reasons the principles in SAB 104 and its focus on the earnings process does not provide us with the answers we need to the questions this paper poses.

APPENDIX III—MEASUREMENT OF REVENUE

Introduction

- III.1 In Chapters 3 and 4 various different revenue recognition approaches were discussed. However, measurement has not so far been mentioned, apart from a few references to reliability. That is not surprising because, as the authors explained back in Chapter 1, the focus of this paper is the recognition of revenue, rather than its measurement.
- III.2 As also explained in Chapter 1, some believe it is not possible to discuss revenue recognition properly without also discussing revenue measurement; in their view the issues cannot be separated. The authors disagree with that view, and hopefully the discussion to date has vindicated that decision.
- III.3 However, even though the authors do not want to discuss measurement at length in this paper, there are a couple of issues they wish to touch on for the sake of completeness. The first issue concerns how much total revenue should be recognised for the contract as a whole, and the second concerns how to determine the amount of revenue that should be attributed to each disaggregated part of a contract when disaggregation takes place.

How much total revenue should be recognised?

- III.4 This issue is simply expressed: when the contractual customer consideration amount is say €1m, what should be the total revenue recognised on the contract? A few years ago this issue would have been a non-issue; everyone would have said the contractual customer consideration amount (ie €1m)²⁷ should be the amount recognised, regardless of whether the contract is being disaggregated for revenue recognition purposes. However, more recently other possibilities have been explored. For example, one possibility is that the total revenue on the contract should be the current value of the goods or services provided, which could of course be greater or less than the contractual consideration amount.²⁸ This would mean that, regardless of whether the current value of the goods or services provided is lower than the contractual customer consideration amount (implying the transaction has probably been over-priced), is higher than the contractual customer consideration amount ('under priced') or 'fairly priced', the total revenue recognised would be the current value of the goods or services provided.
- III.5 The approach described in the preceding paragraph is just one example of the sort of measurement approach that in theory might require (or permit) total revenue to be higher or lower than the contractual customer consideration amount because the amount by which it exceeds (or is less than) the contractual customer consideration amount will be recognised as an expense (or other income statement credit item).

²⁷ Or to be precise, the present value of the €1m consideration. However, for simplicity the discussion in this chapter will ignore the time value of money.

²⁸ The IASB has recently started a global comprehensive debate on measurement. As the authors have no wish to pre-empt that debate, they avoided using terms like 'fair value' in this appendix except where absolutely necessary; instead they use the hopefully relatively neutral 'current value'.

Revenue Recognition—A European Contribution

For example, assume that the contractual customer consideration is €1m and the total cost to be incurred by the supplier is estimated to be €0.8m. Under some measurement systems it might be that, say, €1.1m of revenue and €0.9m of expenses are recognised; or say €0.9m of revenue, €0.1m of other income statement credits and €0.8m of expenses.

- III.6 However, the authors believe that this issue is not unique to revenue accounting: indeed, it is one of the key issues that is to be addressed in the forthcoming debate on measurement that the IASB will be leading. The authors have no desire to pre-empt that debate in this paper. However, if we do not at least assume what the total revenue will be, it will be difficult to discuss the second issue (which concerns the allocation of that total consideration). Therefore, to keep things simple, for the purpose of the discussion in this appendix it is assumed that the total revenue arising on a contract will be the present value²⁹ of the contractual customer consideration amount, regardless of whether the revenue recognition approach:
- (a) focuses on the contract as a whole (as is the case with Approach A),
 - (b) focuses on part-contracts (as is the case with Approaches B and C), or
 - (c) adopts a continuous approach (as is the case with Approach D).

How much revenue should be attributed to each disaggregated part of a contract?

- III.7 It follows from the above discussion that the main measurement issue to be discussed in this paper is how much revenue should be attributed to each disaggregated part of a contract. This issue could be relevant regardless of whether it is a critical event approach or a continuous approach that is being applied.
- (a) It will be relevant in the case of a critical event approach that involves disaggregating the contract into part-contracts, so that the 'right' amount of revenue is recognised in respect of each part contract. It will therefore not be relevant for approaches that do not in any circumstances disaggregate the contract into part-contracts, such as Approach A. (Under Approach A, revenue arises only on completion of the whole contract; and at that time the amount of revenue that will arise will be the full contractual customer consideration amount.)
 - (b) It will also be relevant in the case of a continuous approach if it has been decided to disaggregate the contract for presentation or practical reasons. However, the issue is not relevant if there is to be no disaggregation.
- III.8 There are two broad approaches that can be applied to determine the revenue to be attributed to each disaggregated part of a contract: the amount of revenue arising could be measured directly in some way, or it could be determined through some sort of allocation basis. In the remainder of this appendix we describe and compare the following possible measurement approaches:
- (a) Using the amounts specified in the contract (Method 1).

²⁹ For simplicity, the time value of money is ignored for the remainder of this chapter.

Appendix III—Measurement of revenue

- (b) Measuring the value of the increase in assets or decrease in liabilities that has arisen as a result of the revenue-generating activity (Method 2).
- (c) Measuring the change in the value of the unperformed performance obligations (Method 3).
- (d) Allocating the total revenue by reference to the values referred to in (b) or (c) above (Method 4):

Method 1—The amounts specified in the contract

- III.9 Assume for a moment that we are applying a critical events approach that requires contracts to be disaggregated only to the extent that the contractual terms create rights to consideration part of the way through the contract (as is the case under Approach B). It seems likely that, if the contractual terms have the effect of creating one or more rights to consideration during the performance of the contract, those terms will also make clear what the amount of that right to consideration would be. One way on which the supplier could determine the amount of revenue that will arise in respect of each part-contract would be to use those contracted amounts as the revenue that arises on each of the part-contracts.
- III.10 Some would argue that this method (Method 1) produces revenue numbers that are definitive. In other words, if the contract says that, say, €25 of revenue arises on the first part-contract, €30 on the second and €45 on the third, then it is beyond dispute that that is the revenue that arises on each part-contract. However, some others have some concerns about the approach. They argue in particular that:
- (a) it relies heavily on the contractual terms and this is a disadvantage because the objective should be to reflect the economic substance of the arrangement. In their view, by relying unquestioningly on the contractual terms, there is a danger that the revenue recognition pattern will be based on legal form rather than economic substance. It also means that the revenue amounts for each part-contract are open to manipulation by agreement between the two parties; and
 - (b) although the approach is easy to apply in the context of Approach B, it cannot be applied to Approaches C and D because those approaches do not disaggregate the contract in accordance with the contractual terms.
- III.11 The concern described in (a) is of course only an issue if the contracting parties have agreed to contractual terms that are inconsistent with the economic substance (for example, terms that give the supplier rights to consideration that bear no resemblance to the value of the work done), and some would argue that anti-abuse considerations should not enter into a debate about concepts. The authors do not intend to debate that issue though, because they agree with the concern raised in (b) and believe it means that Method 1 is at best of limited value.

Method 2—Measuring the value of the increase in assets or decrease in liabilities

- III.12 Method 2 is based on a simple theory: if revenue arises as there is a particular type of increase in assets or decrease in liabilities, then, if we can measure that increase or decrease, we will know the amount of revenue that has arisen.

Revenue Recognition—A European Contribution

III.13 For example, in the case of disaggregation approaches based on rights to consideration (ie Approach B), it would involve measuring the value of the right to consideration that has arisen; and in the case of disaggregation approaches based on the notion of the supplier producing items of part-output that have value to the customer (ie Approach C), it would involve measuring that “value to the customer”. Another way of implementing the method might be to estimate the value of the fulfilled performance obligations (and recognise that amount as revenue).

III.14 One possible concern is that under this method the sum of the revenue amounts attributed to the part-contracts might not equal the contractual customer consideration amount. Some would not be concerned about this; they would regard the sum of the part-contract revenue amounts as the total revenue arising on the transaction and the amount by which that exceeds or falls short of the contract consideration as a separate gain or loss. However, the authors explained in paragraph III.6 that for the purposes of the discussion the total revenue arising on a contract will be assumed to be the contractual consideration amount. That will often not be the case under Method 2, unless allocation techniques are used (which is, in effect, Method 4).

III.15 Of course, there are some disaggregation approaches where this would not be an issue anyway. For example, it is unlikely to be an issue if disaggregation is by reference to rights to consideration (because the sum of the rights to consideration will equal the contractual consideration amount). And, if the focus is on fulfilled performance obligations, it will depend.

- (a) It might not be an issue if the fulfilled performance obligations are measured at an amount that includes an appropriate amount of profit or loss.³⁰
- (b) It also would not be an issue if we are content for the difference between the sum of the revenue amounts attributed to the part-contracts and the contractual customer consideration amount to be treated as revenue. For example:

Assume that, just before the supplier's year-end, it enters into a contract and the main terms of that contract are as follows:

- the supplier undertakes to carry out certain tasks for a customer and, in exchange, the customer agrees to pay the supplier €100;
- under Approach B it is possible to disaggregate the tasks that the supplier must perform into three part contracts, each of which involves a single performance obligation; and
- the value of each of the three performance obligations is €30.

³⁰ It might seem odd to be discussing the measurement of liabilities in a paper on revenue, but in fact there is an interaction between accounting for revenue and accounting for non-financial liabilities. They are in effect just parts of the bigger issue of ‘accounting for credits’. It is therefore difficult to get very far into the debate about revenue measurement without also discussing the measurement of liabilities and whether our proposals for revenue measurement result in inconsistencies with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*—which is one reason why the authors decided not to discuss revenue measurement in detail in this paper. It is nevertheless worth mentioning that the issue touched on in the last sentence of this paragraph—whether (and if so the extent to which) liability measures should include a profit (or loss) element is at the centre of the IASB’s recent *Insurance Contracts* Discussion Paper..

Appendix III—Measurement of revenue

At the first reporting date following the contract being signed, the supplier has undertaken no activity at all pursuant to the contract (because the contract was signed only a few days before the reporting date). By the second reporting date, one of the part-contracts has been fully completed, by the third reporting date a further part-contract has been fully completed, and by the fourth reporting date the contract as a whole has been completed.

So the total revenue arising under the contract will be €100. As has already been explained, revenue arises only from activities undertaken pursuant to a contract with a customer, so no revenue will arise until the supplier starts to perform (which is at some point after the first reporting date) and all the revenue will have arisen by the time the supplier finishes performing (which is at some point between the third and fourth reporting dates). If we focus on obligations fulfilled (which is what we would do under Method 2), revenue of €0 would arise in the first period, followed in subsequent periods of €30, €30, and €40.³¹

In other words, although the value of the performance obligation fulfilled in the final period is only €30, revenue of €40 arises because the difference between the sum of the revenue amounts attributed to the part-contracts and the contractual customer consideration amount has been treated as revenue of the period in which the contract has been completed. Of course, as sub-paragraph (a) suggests, some or all of this revenue might be treated as having arisen in earlier periods if the performance obligations are measured using a different basis.

III.16 Another concern for some is the reliability of the measures. For example, if we are applying Method 2 to Approach C, the focus will be on items of part-output that are capable of being used for their intended purpose or of being sold at an amount that reflects their worth when used for that intended purpose. 'Capable of being sold' means either that the supplier habitually sells the item involved separately, the customer habitually buys or sells it separately or that there is a market exists for items that are substantially the same.

- (a) If the item is *not* capable of being sold but is capable of being used for its intended purpose, it could be difficult to estimate the value to the customer because there will be no observable market and no (or few) transactions involving the customer or the supplier.
- (b) If the item is capable of being sold that means there is a market for items that are substantially the same. However, it can still be difficult to assess how the prices derived from that market should be adjusted to arrive at estimates of the value to the customer of the actual item of part-output.

For some this is a major concern; for others an awkwardness that can be overcome.

³¹ At the end of the first period, no performance obligations have been completed so the aggregate value of the obligations is fulfilled (and therefore the cumulative aggregate revenue that has arisen) at that point is €0. Similarly, at the end of the second period, one performance obligation (with a value of €30) has been completed so the cumulative aggregate revenue that has arisen is €30; meaning that the revenue arising in that second period is €30 (ie 30 less €0). And so on.

Method 3—Measuring the change in the value of the unperformed performance obligations

- III.17 A third possible approach would be to focus on the *unperformed* performance obligations. In effect, whilst Method 2 focuses on what has been done, Method 3 focuses on what has still to be done. This difference is worth illustrating by looking again at the simple example in paragraph III.15(b).
- (a) Under Method 2 (when we were focusing on obligations fulfilled), revenue of €0 would arise in the first period, followed in subsequent periods of €30, €30, and €40.
 - (b) If we focus on obligations still to be fulfilled (as we would under Method 3), the revenue that would be recognised in each period would be: €0, €40, €30, and €30.³²
- III.18 In other words, the effect of the difference between the two methods is the timing of the recognition of above- or below-market levels of revenue. Under Method 2, the extra revenue arising on the transaction is recognised at the end of the contract, and under Method B at the beginning of the contract. (For example, if the supplier had given the customer a discount for entering into the contract, that discount would be recognised at the end of the contract under Method 2 and at the beginning under Method 3.) That is why the measurement of the performance obligations is so important. Under a different measurement approach in which the above- or below-market levels of revenue is taken into account in the liability measure, the difference between the two approaches might disappear.

Method 4—Allocating the total revenue

- III.19 One of the concerns raised during the discussion of Methods 2 and 3 was that the sum of the revenue amounts arising from each part-contract might not equal the contractual consideration amount. One way of dealing with this issue might be to apply a rule. For example, any difference could be treated as arising in the first period or perhaps in the final period; or alternatively, shortfalls could be recognised in the first period and excesses in the last period.
- III.20 However, another way of dealing with the issue might be to use an allocation method. For example, we could pro rata the contractual customer consideration amount between the performance obligations on the basis of their aggregate value. Consider the example in paragraph III.15(b). The contractual customer consideration amount is €100 and the aggregate current value of the performance obligations is €90, which means that revenue of €33.33 (ie €30 multiplied by €100 divided by €90) would be recognised as each part-contract is completed.
- III.21 It could be argued that this method (Method 4) has advantages over all the methods discussed so far.

³² At the end of the first period, the aggregate value of the performance obligations unfulfilled is €90. However, the supplier has carried out no activities under the contract, so no revenue can have arisen. At the end of the second period, the aggregate value of the performance obligations unfulfilled is €60—so revenue of €40 (ie €100 less €40) is deemed to have arisen in that second period. And so on.

Appendix III—Measurement of revenue

- (a) Unlike Method 1, it does not rely on the contractual terms and therefore its application is not limited, like Method 1, to approaches that disaggregate by reference to contractual terms.
- (b) Unlike Methods 2 and 3, the sum of the revenue arising on the part-contracts will equal the contractual consideration amount without having to apply a rule about how to treat the difference and without having to measure liabilities at an amount that includes a margin.

Discussion

III.22 However, before discussing these various ‘measurement’ methods, it is perhaps worth asking what it is that makes a method a good method and better than another method. The Framework tells us that good financial information is relevant, reliable, comparable and understandable. The discussion of reliability is of most relevance to our choice of allocation method, and the parts of that discussion that are probably of most relevance are as follows:

31 To be useful, information must also be reliable. Information has the quality of reliability when it is free from material error and bias and can be depended upon by users to represent faithfully that which it either purports to represent or could reasonably be expected to represent.

Faithful representation

33 To be reliable, information must represent faithfully the transactions and other events it either purports to represent or could reasonably be expected to represent. Thus, for example, a balance sheet should represent faithfully the transactions and other events that result in assets, liabilities and equity of the entity at the reporting date which meet the recognition criteria.

34 Most financial information is subject to some risk of being less than a faithful representation of that which it purports to portray. This is not due to bias, but rather to inherent difficulties either in identifying the transactions and other events to be measured or in devising and applying measurement and presentation techniques that can convey messages that correspond with those transactions and events. In certain cases, the measurement of the financial effects of items could be so uncertain that entities generally would not recognise them in the financial statements; for example, although most entities generate goodwill internally over time, it is usually difficult to identify or measure that goodwill reliably. In other cases, however, it may be relevant to recognise items and to disclose the risk of error surrounding their recognition and measurement.

Prudence

37 The preparers of financial statements do, however, have to contend with the uncertainties that inevitably surround many events and circumstances, such as the collectability of doubtful receivables, the probable useful life of plant and equipment and the number of warranty claims that may occur. Such uncertainties are recognised by the disclosure of their nature and extent and by the exercise of prudence in the preparation of the financial statements. Prudence is the inclusion of a degree of caution in the exercise of the judgements needed in making the estimates required under conditions of uncertainty, such that assets or income are not overstated and liabilities or expenses are not understated. However, the exercise of prudence does not allow, for example, the creation of hidden reserves or excessive provisions, the deliberate understatement of assets or income, or the deliberate overstatement of liabilities or

Revenue Recognition—A European Contribution

expenses, because the financial statements would not be neutral and, therefore, not have the quality of reliability.

III.23 Thus, the more the method reflects the underlying economics, the better it is likely to be.

III.24 So, in assessing the various measurement approaches discussed above, we need to consider factors such as:

- (a) whether the approach is capable of being applied. The authors believe that Method 1 is capable of being applied only when the contract is disaggregated by reference to the contractual terms and, as they do not really favour such a disaggregation approach, they do not like Method 1 much either.
- (b) whether the approach results in reliable numbers. In the authors view, any revenue recognition approach that relies on disaggregation will involve a degree of estimation and therefore uncertainty and, generally speaking, none of Methods 2 to 4 is any better or any worse than any of the other methods.
- (c) whether the approach produces an accounting result that makes sense (ie is faithfully representative) and is consistent with existing concepts. Bearing in mind the assumption made in paragraph III.7, measurement approaches that result in a difference arising between the sum of the revenue amounts of the part-contracts and the contractual consideration amount raise awkward questions about the treatment of the difference. Such differences will not arise under Method 4. On the other hand, methods that involve allocation rather than measurement (ie Method 4) are less likely to result in liabilities being recognised and measured in a way that is consistent with, for example, IAS 37. Method 3 is the method that appears most likely to meet that criteria.

APPENDIX IV—THE EXAMPLES USED IN THE PAPER

The Cherrywood Table

An individual walks into a furniture shop, sees an oak table, and enters into a contract with the shop for a table of the same design as the oak table but made in cherrywood to be delivered to their house in three months' time.

The Boat Builder

Assume a company makes boats. The boats are large and complex to make and the boat builder makes only a few boats each year. Usually it makes the boats to order (ie under the terms of a customer contract) and, because its boats are very attractive, it generally has a very full order book. However, occasionally it is short of orders and in those circumstances it makes the most popular designs of boat for inventory.

In 2005 it did not need to make any boats for inventory; it worked at full capacity making boats to order.

In 2006 those of its customers that buy the most popular designs decided to delay placing their orders, comfortable in the knowledge that the boat builder would build the boats they want anyway, meaning they could buy the boats from stock instead. That meant much of the company's time was spent building for inventory, revenue fell significantly.

In 2007, the boats built for stock were sold and customers went back to placing orders in advance for boats.

The Chair

A customer buys an already-made chair from the supplier, and takes it home in his car.

The Washing Machine

A customer with a washing machine enters into a contract with a separate supplier (the plumber) that requires the supplier to connect the washing machine to the customer's existing plumbing and do all other things that are necessary to make the washing machine work.

The Cleaner

A customer enters into a contract that requires the supplier (the cleaner) to visit his office every work day evening for a year and carry out on each of those visits an identical set of cleaning tasks.

Revenue Recognition—A European Contribution

The Bridge

A customer enters into a contract with the supplier (a construction company) that requires the supplier to build a bridge to the customer's design and specification. The contract envisages that the bridge will take three years to complete.

The Computer

A customer orders from the supplier a particular specification of computer along with a specified package of off-the-shelf software. The supplier is required to supply and deliver the computer with the software already loaded, connect up all the wires and make sure everything works, and provide the customer with ten hours of tuition on how best to use the computer and its software.

NB. This is assumed to be a multiple-element arrangement that has at least two components: the supply, delivery and set-up of the computer and software; and the tuition.

The Swimming Pool

A customer enters into a contract that requires the supplier (a builder of swimming pools) to construct a swimming pool of a specified shape, size and depth in a specified location within his garden.

The supplier starts its work by moving various items of equipment into the customer's garden (Stage 1). Stage 2 will be to dig out the hole for the swimming pool. When it has dug a hole of the right shape, size and depth and in the right location, it stops digging and commences Stage 3: lining the hole and attaching various pumps to the hole and lining.

The IT company

A supplier agrees to supply and deliver a computer hardware system to a customer and to install on that system (after it has been delivered) some software that has been specially tailored to that system and customer. The computer hardware represents 95% of the value of the contract and the software just 5%, although the hardware cannot be used unless and until the software has been installed.

APPENDIX V—GLOSSARY

This glossary sets out the main terminology used in the paper and explains how that terminology is used.

Income statement

The term ‘income statement’ is used in this paper as a generic term to refer to the performance statement or statements (or statement of income and expenses, statement of comprehensive income or whatever other title(s) are given to the statement or statements).

Revenue

The term ‘revenue’ is used in the paper to refer to the top line of the income statement. This line has sometimes been labelled ‘turnover’ or ‘sales’ in the past. Under some performance reporting presentations, there may be several lines at the top of the performance statement that when aggregated represent turnover. The paper’s references to the ‘top line’ should be read as including those subtotals.

At the end of Chapter 2 of this paper, we concluded that our working definition of revenue should be: “Revenue is the gross inflow of economic benefits that arises as an entity carries out activities pursuant to a contract with a customer.”

Other income statement credits

All the credits that are recognised in the income statement that are not revenue are referred to in the paper as ‘other income statement credits’. For example, if it is decided that the sale of a fixed asset does not give rise to revenue, either the sales proceeds or the profit on the sale (depending on whether the item is being presented gross or net in the income statement—an issue that is not relevant to the paper) will be an ‘other income statement credit’ items. Similarly, if an asset increases in value and it is decided that increase should be recognised in the income statement but not as revenue, it will be recognised as an ‘other income statement credit’ item.

Expenses

This term is used to refer to all the debits recognised in the income statement. For presentation purposes it can be useful to differentiate between ‘losses’ and other types of expense, but that issue is not relevant to this paper.

Profit, Loss

In the paper, ‘revenue’, ‘other gains’ and ‘expenses’ are the only items that appear in the income statement. However, when talking about a particular item, transaction or other event, the paper may use the terms ‘profit’ or ‘loss’—by which it means the revenue and other gains arising on the item, transaction or event, less the related expenses.

Revenue Recognition—A European Contribution

Contract

A 'contract' is an agreement between two parties. To be a contract, the agreement does not need to be in writing. Thus, even when one party goes into a sweet shop and buys a sweet, there is a contract between the buyer and the seller.

Customer

The 'customer' is the party to the transaction other than the supplier.

Right to consideration

The term 'right to consideration' is used in the paper to refer to an enforceable and unconditional right to receive some or all of the consideration payable by the customer under the contract. A right to consideration is not the same as a right to reimbursement, nor is it necessarily the same as a construction company's right to be paid stage payments as its construction work progresses.