

A shifting software revenue recognition landscape?*

Insights on potential impacts of IFRS and US GAAP convergence



Dear Executive,

The International Accounting Standards Board and the US Financial Accounting Standards Board have been committed to converging International Financial Reporting Standards (IFRS) and US Generally Accepted Accounting Principles (US GAAP) since the Norwalk Accord of 2002. Many commentators say convergence would simplify financial reporting and reduce the compliance burden for listed companies, especially those with stock market listings in more than one jurisdiction and those that participate in cross-border, capital-market transactions. Recently the debate has expanded in a new direction and focuses more on whether US companies may be able to adopt IFRS.

These potential changes, if realised, will significantly alter the international landscape of accounting. Software companies must now explore the implications of such a possible move in the near future.

The economic and technical characteristics of the software industry make revenue recognition not only a thorny issue, but one of strategic importance for companies. US GAAP has a complex set of rules dedicated to the software industry whereas IFRS has focused more on the principles, leaving greater scope for judgment. Beyond identifying the similarities and differences between IFRS and US GAAP, therefore, it is necessary to determine whether compliance with US GAAP software revenue recognition rules may conflict with IFRS.

In this paper, the PricewaterhouseCoopers (PwC) Global Software practice examined certain situations in which adopting IFRS may require a reconsideration of revenue recognition policies and practices that were driven by US GAAP compliance. This guide does not comprehensively address all issues involved.

PwC is ready to help you further understand the similarities and differences between IFRS and US GAAP. Please contact us via email at pierre.marty@fr.pwc.com or at dean.petracca@us.pwc.com.

Sincerely,



Pierre Marty
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Revenue recognition is a complex issue for software companies. As the marketplace begins discussing the possibility that IFRS will one day be used instead of US GAAP, a need to analyse the compatibility of certain US GAAP positions with those of IFRS arises. In this paper we discuss the following issues:

- Existence of a written arrangement
- Multiple-elements contracts and the treatment of future obligations
- Accounting for post-contract customer support
- Guidance on time-based licenses
- The question of discounts when applying the residual method

For each issue, we highlight the context, give a brief summary of the US GAAP approach and compare it with that of IFRS. To conclude, we discuss the compatibility between US GAAP and IFRS.

The examples illustrated in this document demonstrate that compliance with revenue recognition under US GAAP rules may not necessarily bring about compliance with those of IFRS.

La reconnaissance du revenu est une question complexe pour les sociétés de logiciels. À l'heure où le marché commence à débattre de la possibilité que les normes IFRS puissent un jour être utilisées à la place des US GAAP, le besoin d'analyser la compatibilité de certaines positions retenues par les normes américaines avec celles des IFRS se pose. Dans ce document, nous discutons des questions suivantes:

- Existence d'un accord formalisé
- Contrats à éléments multiples et traitement des obligations futures
- Comptabilisation des contrats de maintenance
- Dispositions relative aux licences temporaires
- Impact des discounts dans l'application de la méthode de la « valeur résiduelle »

Pour chacune des questions, nous précisons le contexte, donnons un bref résumé de l'approche des normes US GAAP et la comparons avec celle des IFRS. Pour conclure, nous débattons de la compatibilité entre les normes US GAAP et les normes IFRS.

Les exemples illustrés dans ce document démontrent que la conformité à la reconnaissance du revenu selon les règles des normes US GAAP n'emporte pas nécessairement conformité à celles des normes IFRS.

Die richtige Ertragsabgrenzung ist ein komplexes Thema bei Softwareunternehmen. Sobald der Markt die Möglichkeit diskutiert, dass die IFRS eines Tages die US-GAAP ablösen werden, ist es geboten die Vereinbarkeit gewisser US-GAAP Bilanzierungs- und Bewertungsgrundsätze mit den IFRS zu prüfen. In dem vorliegenden Dokument diskutieren wir die folgenden Fragen:

- Vorhandensein einer schriftlichen Vereinbarung
- Verträge über mehrere Gegenstände und Behandlung zukünftiger Verpflichtungen
- Behandlung von nachvertraglichen Kundendienstleistungen
- Regeln bei zeitgebundenen Lizenzen
- Die Frage nach Preisnachlässen bei Anwendung der Rest-/ Rückstandsmethode (residual method)

Wir stellen bei jeder Frage den Kontext heraus, geben eine kurze Zusammenfassung des Vorgehens nach den US-GAAP und Vergleichen dieses mit der Behandlung nach den IFRS. Abschließend diskutieren wir die Vereinbarkeit der US-GAAP mit den IFRS.

Die in diesem Dokument vorgestellten Beispiele veranschaulichen, dass die Befolgung der Ertragsabgrenzungsgrundsätze nach den US-GAAP nicht notwendigerweise zu einer Übereinstimmung mit den IFRS führt.

Softwarekompanien's income recognition is a complex task. As international financial reporting standards (IFRS) continue to develop and improve, its importance has been increasingly recognized. Now, the industry has begun to discuss the possibility of international financial reporting standards replacing US GAAP. Given this trend, people recognize the need to explore the compatibility of the two standards in certain aspects. This document discusses the following issues:

- Written agreement
- Multi-element contract and accounting treatment of future obligations
- Accounting treatment of support services provided after contract termination
- Discounting issues when applying the residual method
- Treatment of software license agreements based on time

For each issue, we provide a detailed explanation of the relevant background, summarize the accounting treatment under US GAAP, and compare it with the accounting treatment under IFRS. Based on this, we analyze the differences and compatibility between the two standards.

The examples listed in this document show that there are certain differences between the two standards, and the income recognition under US GAAP may not always meet the requirements of IFRS.

Introduction

Accounting principles generally accepted in the United States specify numerous rules and accounting treatments for software revenue recognition. The range of these approaches reflects both the complexity of the industry environment and of the business practices adopted by software companies. Beyond the concepts and general application of principles, these rules and treatments provide specific practical solutions to clearly identified issues. The underlying objective is usually to restrict companies' ability to recognise revenue prematurely, especially where their obligations extend over time. US standard-setters generally take a highly prescriptive approach, and the overall result has been to leave little room for companies to exercise judgment.

For its part, the International Accounting Standards Board has not issued very detailed standards on revenue recognition. This may be partly a reflection of its desire to leave greater scope for judgment. Also, the reassessment and clarification process experienced within US GAAP in order to resolve ambiguities and restrict diversity of interpretations has not and perhaps may not take place within the IASB framework.

Whatever the accounting standards do or do not prescribe, software company valuations will continue to reflect the trust investors feel able to place in their disclosed results. Like it or not, US GAAP is still the current lingua franca for the global software industry and the abolition of the need for US foreign private issuers to reconcile IFRS to US GAAP could adversely impact value for foreign registrants in the absence of appropriate additional disclosures.

The challenge for companies reporting under both US GAAP and IFRS is to identify and understand the rationale for divergences between the two frameworks. Treatments that are allowed or possible under IFRS may not necessarily be compatible with US GAAP. Conversely, strict application of US GAAP on revenue recognition may, in some circumstances, result in non-compliance with IFRS. A review of financial information published by European companies listed in both the United States and Europe shows that, in general, these companies have taken the view that if they comply with US GAAP, they will comply with IFRS revenue recognition rules. Thus, companies may be tempted to assume that the stricter US GAAP revenue recognition criteria bring de facto compliance with IFRS.

This is not necessarily the case. Our analysis finds that in some cases US GAAP requires deferral of revenue recognition where IFRS might not. For example, cases in which US GAAP requires a signed written contract prior to any recognition of revenue may need to be reassessed under IFRS. Similarly, the US GAAP rules for establishing fair value in the context of software sales may conflict with the broader concept of fair value used in IFRS. Consequently, failure to establish VSOE under US GAAP does not necessarily mean that such fair value could not or should not be established under IFRS. Other sources of possible divergence between US GAAP and IFRS include accounting for post-contract customer services, the allocation of discounts when using the residual method and accounting for time-based licenses.

These examples are not exhaustive. Other matters could have been addressed, such as US GAAP requirements on extended payment terms or the differences arising from specific or non-specific obligations for upgrades or new products. However, these cases are not addressed in this paper.

Existence of a written arrangement

Context

Agreeing on the terms and conditions of a sale should be a relatively straightforward process. In the software industry, substantiating this step can be more difficult in practice. The industry had faced a succession of accounting irregularities in which certain companies had been recognising revenue before agreement on the terms and conditions had been reached. The question then arose as to whether prescriptive rules and conditions were needed to prevent recognition of revenue before an agreement had been finalised and to avoid the adoption of divergent practices, especially regarding the use of written contracts. These issues are exacerbated by the very nature of the industry; software companies may struggle to meet client expectations over time and may face client pressure to make concessions not written into the initial contract or considered during the negotiation phase.

Brief summary of the US GAAP approach

Under US GAAP, no revenue can be recognised unless persuasive evidence of an arrangement exists. What constitutes such evidence may differ, depending on customary business practice. By extension, US GAAP rules state that where customary practice is to obtain a signed contract, no revenue may be recognised until a final written contract has been signed by both parties. A letter of intent summarising the main terms of the contract is not sufficient, because the parties have not yet agreed to all the terms and conditions that would be included in a final signed contract.

In addition, if, at the balance sheet date, the contract has not been signed by one of the parties, no revenue can be

recognised, even if all other revenue recognition criteria have been met and the lack of signature is due solely to administrative formalities extraneous to the negotiations between the parties.

This approach is intended to avoid accounting practices that might result in revenue being recognised too early or from fictitious transactions. Other revenue recognition criteria (such as the occurrence of delivery, which would be an issue in many other sectors because of the costs of manufacturing or of the rendering of the services that this would trigger) are less problematic in the software industry, where duplication and shipment costs are often insignificant. However, two other explanations are possible:

- To improve comparability between companies in the same industry, the rules aim to limit the scope for differing interpretations and the use of different accounting treatments for similar facts and circumstances. Laying down a strict rule applicable in all cases restricts the opportunity for subjective interpretations.
- From a technical standpoint, difficulties arise in starting to recognise revenue, even on elements that have already been delivered, if no signed contract exists. In many cases, a contract that has not yet been signed is still under negotiation and, hence, may be amended before it is finally signed. Potentially, such amendments will involve the insertion of supplementary clauses extending the vendor's obligations (upgrades, new versions, discounts on future products, add-on services, etc.). If the content of such clauses is unknown, it becomes technically impossible to allocate revenue to the delivered element based on an allocation of the total revenue among the various elements of the contract depending on their respective fair values.

Comparative analysis of the IFRS approach

What is the IFRS position on this issue? So far, no specific pronouncements on software revenue recognition have been made. So one must look at more general issues.

The introductory paragraph of IAS 18 states: “Revenue is recognised when it is probable that future economic benefits will flow to the entity and these benefits can be measured reliably”. So, in principle, two conditions must be met.

With regard to the probability of a transfer of future economic benefits, while final signature of a contract is a guarantee of the existence of an agreement on the deliverable and price, it is conceivable that a company might regard an agreement as having been reached between the parties to a transaction, even if the final version of the contract has yet to be signed by both parties (and provided that the collection of the resulting receivable is legally enforceable). While this is conceivable, it is important that a company have a complete agreement of all the contract terms, including all explicit and implied obligations, prior to recognising revenue. This addresses the IAS 18 criteria that revenue and costs can be measured reliably prior to recognising revenue.

It is common practice in the software industry to sign a master agreement setting out the general legal features of transactions between the parties, with the client issuing a separate purchase order for each license agreement. Under US GAAP, the revenue from each transaction could not be recognised if the master agreement had not been signed. However, sales are often made before the master agreement is finally signed (or renegotiated, if it is being renewed). Under IFRS, the company may regard the condition of a transfer of probable future economic benefits as having been met, assuming the company can demonstrate that it has considered all explicit and implied obligations. Indeed, delivery may have occurred (based on a purchase order), payment may already be due and the company may accordingly have a legally enforceable right to collect its receivable. In some cases, payment may have already been made.

The second condition stipulated in the introductory paragraph to IAS 18 is whether the future economic benefits can be measured reliably. For this to be possible, all the terms and conditions governing the vendor/client relationship must be known. However, in many cases the transaction involves multiple deliverables (license, service, post-contract customer support, upgrades, etc.) over a long period, and the client generally seeks guarantees as to expected future services and enhancements so as to safeguard the long-term viability of its investment. For its part, the software vendor may be under pressure to complete a sale, resulting in a tendency to accept terms and conditions that may prove disadvantageous in the

future (such as right of return, performance warranty, entitlement to future enhancements, discount on future products, etc.). It is therefore clear that, for as long as the contract is still under negotiation (even if some elements have already been delivered), it will be difficult to measure the future economic benefits reliably. The US GAAP stance is that to avoid any risk, an entity must be able to provide persuasive evidence of an arrangement, and such evidence may only exist if a contract has actually been signed by both parties when it is customary business practice to obtain one. Under IFRS, the same presumption exists that the terms of an agreement are still under discussion until the contract is signed by both parties. But it is also conceivable that, although total agreement has been reached, the contract may not yet have been signed for some reason independent of the negotiations between the parties. In such cases, recognising the revenue might not be in contravention of IAS 18, though the company might have difficulty in proving its case.

IAS 18 does not change the above analysis. However, under both IFRS and US GAAP, the principle of allocating revenue to the elements to be delivered implies that all those elements must have been agreed to by the parties before the revenue attributable to each element can be recognised. So even if one element (such as the license) has already been delivered, if the scope of future services or upgrades is still under negotiation, the revenue on the delivered element cannot be recognised because it is impossible to determine the amount of revenue attributable to that element.

Is the US GAAP approach compatible with IFRS?

While US GAAP provide a set of criteria that cannot be ignored, circumstances may arise in which IFRS revenue recognition criteria are met when US GAAP criteria would not be. Such cases might be rare in practice, and the company would need to provide evidence that substantial agreement had actually been reached (including that the company can reasonably and reliably estimate revenue and all costs to be incurred) even though technically the contract has not yet been signed. While US GAAP and IFRS treatments may be the same the majority of the time, at times it might be inappropriate to delay revenue recognition under IFRS although that would be required under US GAAP.

Multiple-elements contracts and the treatment of future obligations

Context

Software licenses are rarely sold on a stand-alone basis. More often, they are sold with a package including, for example, hardware, other licenses, upgrades, maintenance or services, training, specific enhancements or interfaces, installation services and post-installation support. The package is negotiated as a whole, with these negotiations forming the basis for the commercial relationship between vendor and client.

This inevitably raises two issues: how to allocate revenue among the elements, and how to allocate revenue among accounting periods when certain elements are delivered over more than one period.

Brief summary of the US GAAP approach

SOP 97-2 introduced a number of concepts and requirements in accounting for multiple-element software contracts. The most important of these are:

- The accounting treatment of “when and if available” deliverables. Some products, usually upgrades or enhancements, are often stated in a contract as deliverable to the client when and if they become available to other clients, with no indication of the timing. From a legal point of view, there is consequently no firm obligation to deliver these products.
- The elimination of the option to assess the materiality of undelivered elements.
- The conditions required for allocation of a portion of revenues to a delivered element, and the consequences of non-compliance with these conditions.

Accounting treatment of “when and if available” deliverables

SOP 97-2 takes the view that any element included in a contract is an element to which a portion of the total agreed revenue should be allocated, even if there is no explicit legal obligation to deliver the product or service. The underlying argument for this view is that once an element has been included in the contract, there is a presumption that its inclusion is the result of negotiation and hence it represents some value to the client and has influenced the client’s purchase decision, as this creates an implied obligation to provide that element. This presumption cannot be rebutted by reference to the specific facts and circumstances of the contract in question.

Elimination of the option to assess the materiality of undelivered elements

Before SOP 97-2 was issued, US GAAP rules on software (SOP 91-1) stated that the accounting treatment of undelivered elements in a contract depended on the materiality of the residual obligation to the customer. If the obligation was judged to be immaterial, it had no effect on the accounting treatment. However, difficulties emerged in interpreting this rule, and software companies adopted widely differing practices. One issue, for example, was how to assess the materiality of a software upgrade, given the almost non-existent delivery and duplication costs incurred in order to supply the client.

SOP 97-2 eliminated any exercise of judgment in this area, requiring companies to take all future obligations into account irrespective of materiality.

Conditions required for allocation of a portion of revenues to a delivered element, and the consequences of non-compliance with these conditions.

Under SOP 97-2, total contract revenue must be allocated among the elements of a contract in proportion to the fair value of each element, regardless of the prices specified in the contract. However, revenue may only be recognised where there is vendor-specific objective evidence (VSOE) of fair value for each element in the contract, or when the fair value of all undelivered elements is known, in which case the residual method might apply (see below).

Consequently, SOP 97-2 stipulates that VSOE can only exist if the element in question is also sold separately. If there is no VSOE of fair value, no revenue can be recognised, although there are a few exceptions, such as for maintenance (see below). This concept implies that fair value cannot be measured using estimated costs for completion of the products or services to be delivered. Nor is an estimate based on the market price of similar products acceptable. The only factor that can be taken into account in practice is the price of the element when sold separately. Applying this rule has created numerous problems for companies in practice. For example:

- If the element is never sold separately, there can be no VSOE of fair value.
- Contracts often include rights to future versions, products or enhancements, which, by definition, are not yet being sold. Consequently, there can be no VSOE of fair value for these elements. A software company therefore cannot recognise any revenue on delivered elements so long as there are undelivered elements for which no VSOE of fair value exists.

Comparative analysis of the IFRS approach

Paragraph 13 of IAS 18 and paragraph 11 of the Appendix to IAS 18 provide guidance as to the accounting treatment of multiple elements under IFRS:

- Paragraph 13 of IAS 18 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”.
- Under paragraph 11 of the Appendix to IAS 18, “when the selling price includes an identifiable amount for subsequent servicing, that amount is deferred and recognised as revenue over the period during which the service is performed. The amount deferred is that which will cover the expected costs of the services under the agreement, together with a reasonable profit on those services”.

The wording of these paragraphs clearly indicates that revenue must be allocated to the individual elements of a contract. While it does not provide any specific guidance on how that allocation should be determined, evidence of the fair value is a reliable indicator of the basis on which to make this allocation. In addition, unlike US GAAP, IAS 18 specifies neither the conditions for the determination of fair value nor the consequences of a lack of a fair value for any single element. Under IFRS, the assessment of future obligations is seen as a matter of judgment, whether the obligation is specifically stated in the contract or to some extent implied (as in the case of “when and if available” type obligations).

Because IFRS requires a lower threshold of evidence than the VSOE of fair value to unbundle separate elements in a contract, one would expect that separation of the identified elements would be more common using IFRS. This difference in the level of evidence required to support unbundling may also cause a difference in the allocation of total contract consideration among the separate elements.

We have seen above that the test for evidence of fair value is very narrow under US GAAP, and that lack of evidence requires revenue recognition to be deferred. Under IFRS, there are only some general indications of what constitutes fair value: IAS 18 states that revenue shall be “measured at the fair value of the consideration received or receivable taking into account the amount of any trade discounts and volume rebates allowed by the entity” and that “fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm’s length transaction”.

Although the selling price of an element that is also sold separately by the vendor is an indicator of its fair value under the above definition, other indicators could be used. For instance, the market price of a similar product or service sold by a competitor may be an acceptable indicator under IFRS, provided, of course, that the company could demonstrate that these products or services were, in fact, similar – and that might prove difficult in practice. Indeed, one could argue that software is generally so specific to a vendor that it would be impossible to show sufficient similarities with another product to determine a fair value.

Another fair value approach that is permissible under IFRS is to estimate the future costs of supplying a product or service and add a reasonable standard margin. Indeed, this is the recommended method for allocating the portion of revenue attributable to post-contract customer support under paragraph 11 of IAS 18 (see below).

It would therefore be possible to determine a fair value that complies with IFRS rules but does not meet the specific conditions of SOP 97-2. But does this mean that revenue, deferred under US GAAP because there is no VSOE of fair value, would have to be recognised if the company publishes IFRS-compliant financial statements?

Take the example of a software company selling version V1 of software A for €1,000, plus an entitlement to receive software B, due to be released in six months, for €600. Assume that many other sales packaged in the same way have been made recently at a similar price. Under US GAAP, there is no VSOE of fair value for software B, because it has never been sold separately, as it has not yet been released. But under IFRS, it may be possible to consider the fair value of software B as €600, based on the many other similar sales made under these terms between knowledgeable, willing parties in an arm’s length transaction. This means that it could be wrong to defer recognition of the entire revenue from the contract (assuming, of course, that all other revenue recognition criteria were fulfilled on the sale of software A). However, if the company was unable to substantiate €600 using any acceptable approaches in IFRS, it would have to defer revenue similar to US GAAP.

Is the US GAAP approach compatible with IFRS?

In cases where revenue recognition has been deferred under US GAAP due to a lack of evidence of fair value, careful reassessment may be needed when considering whether to recognise the revenue under IFRS. The aim of this reassessment might be to explain why a particular element is not measurable under IFRS, taking into account the specific circumstances of the reporting entity and the transaction itself (for instance, the relevance of the price of competing products, similar transactions, or the cost plus margin approach). In certain circumstances, it might be unreasonable to conclude that no fair value can be established under IFRS just because the US GAAP conditions are not met.

Accounting for post-contract customer support (PCS)

Context

Traditionally, maintenance (or PCS) contains two main elements: telephone hotlines to resolve technical problems caused by user error and the supply of new versions (fixes and updates). The determination of the fair value of PCS has been the subject of extensive debate under US GAAP, leading to the various solutions contained in SOP 97-2, in the technical practice aids (TPAs) issued on the subject, and in interpretations by the SEC or the accounting firms.

Brief summary of the US GAAP approach

Under US GAAP, evidence of the fair value of PCS is provided by the selling price where this element is sold separately, which can, for example, be the renewal rate written into the contract (provided that this renewal rate is substantive). This rule means that if no renewal rate is specified in the contract, the conclusion usually drawn is that no evidence of fair value exists unless evidence of fair value is provided by another method, if the entity can demonstrate that virtually all renewals are made at a similar price or rates. SOP 97-2 contains an exception to the rule that revenue recognition must be deferred if there is no VSOE of fair value for PCS: if the only undelivered element is PCS, all revenue may be combined and recognised on a straight-line basis over the PCS term.

Comparative analysis of the IFRS approach

According to paragraph 11 of the Appendix to IAS 18, “when the selling price of a product includes an identifiable amount of subsequent servicing (for example, after sales support and product enhancement on the sale of software), that amount is deferred and recognised as revenue over the period during which the service is performed. The amount deferred is that which will cover the expected costs of the services under the agreement, together with a reasonable profit on those services”.

Certain observations can be made on this wording:

- First, the method of measuring PCS revenue that must be deferred may be different from that required under US GAAP. IAS 18 allows cost-based estimates, while US GAAP uses selling price where the element is sold separately.
- Second, as explained above, if evidence of fair value of PCS under US GAAP is not available, the license revenue must be recognised over the PCS term (assuming that PCS is the only remaining undelivered element).

This issue is not addressed in IFRS, and it is debatable which accounting treatment would be most acceptable under IFRS if the company were unable to make a reasonable estimate of the portion of revenue to be allocated to PCS. Should the revenue attributable to the license be deferred, or should the total contract revenue be recognised over the PCS term, or should there be an attempt to best estimate the portion of revenue to be allocated to each element?

More generally, the appropriateness of the approach adopted in the Appendix to IAS 18 is open to judgment. Estimating the cost of PCS is by nature very difficult. PCS consists, on the one hand, of clearly identifiable services such as telephone hotlines and, more importantly, on the other hand, of software updates that incorporate enhancements, added features or bug fixes. In other words, what a client buys with a PCS package is the possibility of remaining up to date and maintaining the value of its investment over time, limiting the risk of rapid obsolescence inherent in this type of product. However, the development costs of these updates cannot, by their very nature, be identified or determined upfront for each client. In practice, these costs are part of the software company's overall R&D budget, and they do not constitute a typical cost of sales that can be associated with a specific transaction. This approach is therefore unsuited to the software industry, and indeed it was a very similar interpretation that led US standard-setters to reject fair value estimates based on cost plus a standard margin for software sales.

Literally, under IAS 18, "the expected costs of the services under the agreement" could be understood as costs directly attributable to the provision of the services. This could therefore exclude R&D costs and would include such costs as assistance (e.g., providing a hotline) and the estimated cost of duplicating and shipping updates. This approach could have the consequence of deferring a relatively small portion of the revenue for maintenance services.

Is the US GAAP approach compatible with IFRS?

What conclusion should we draw from these different approaches? First, the cost-plus approach mentioned under IAS 18 may not lead to the same results as the application of US GAAP. Conversely, where no renewal rate is specified (or, more generally, no VSOE of fair value of maintenance under US GAAP), IFRS compliance may be achieved by a reasonable estimate of fair value based on statistics, market practice or cost estimates (where circumstances allow). Recognition of the license and PCS revenue over the service term should be used only in cases where estimating fair value by alternative means is impossible. Whatever the approach adopted, we recommend that a disclosure be made in the notes to the financial statements of the method used to estimate fair value and with sufficient information to measure the average percentage of revenue allocated to PCS.

Guidance on time-based licenses

Context

The business models used by software companies are constantly changing. Recently, many companies have been offering packages that require the use of accounting methods appropriate for subscription-based services (on-demand, time-based licenses, rights to unspecified future products) – in other words, recognition of revenue over the licensed period of use. From a financial perspective, these packages offer a more predictable and consistent stream of future revenues. In some cases, time-based licenses include PCS, while in others the PCS element is sold separately. These differences can require the application of different accounting treatments.

Brief summary of the US GAAP approach

Two US GAAP pronouncements deal specifically with accounting for time-based licenses: TPA 5100.53, “Fair Value of PCS in a Short-Term Time Based License and Software Revenue Recognition”, and TPA 5100.54, “Fair Value of PCS in a Multi-Year Time-Based License and Software Revenue Recognition”.

In essence, these texts define the criteria required for a company to recognise the license separately from the other elements (primarily PCS). In some circumstances, the portion of revenue attributable to the license must be recognised on delivery to the client, rather than being deferred and recognised over the term of the user license.

The underlying concept dictating the treatment of revenue recognition in these TPAs is whether a “substantive” renewal rate for the PCS element allows it to be separated from the license based on the fair value of the PCS. If the PCS is not regarded as substantive, no VSOE of fair value can be established for this element. And in the absence of VSOE of fair value for the PCS element, all the revenue (license and PCS) must be deferred and recognised on a straight-line basis over the estimated PCS term. This is generally the case when the license and PCS term are coterminous. These TPAs provide guidance as to when a renewal rate for PCS is deemed to be substantive.

Comparative analysis of the IFRS approach

IAS 18 may result in different accounting treatments from those required under US GAAP. Paragraph 20 of the Appendix to IAS 18 states that “fees and royalties paid for the use of an entity’s assets (such as trademarks, patents, software, music copyright, record masters and motion picture film) are normally recognised in accordance with the substance of the agreement. As a practical matter, this may be on a straight-line basis over the life of the agreement, for example, when a licensee has the right to use certain technology for a specified period of time”. It is clear from this interpretation that in the case of time-based technology user licenses, the revenue recognition method most in accordance with the substance of the agreement would be deferral and recognition over the term of the license.

However, the same paragraph 20 goes on to say that “an assignment of rights for a fixed fee or non-refundable guarantee under a non-cancellable contract which permits the licensee to exploit those rights freely and the licensor has no remaining obligations to perform is, in substance, a sale. An example is a licensing agreement for the use of software when the licensor has no obligations subsequent to delivery”. In this case, the most appropriate accounting treatment would be to recognise the revenue when the technology or user license is granted, regardless of whether the license is time-based or perpetual.

This apparent internal contradiction within paragraph 20 of the Appendix to IAS 18 when it is applied to the specific case of time-based licenses highlights the need to apply judgement in determining the most appropriate treatment of these types of arrangements. Take, for example, a time-based license with no future obligation other than a standard PCS package similar to that provided with a perpetual license. Based on the first part of paragraph 20, the revenue would be deferred and recognised over the term of the license, whereas based on the second part of paragraph 20 the revenue would be recognised upon delivery of the software, assuming that maintenance is regarded as a separate element from the license.

Is the US GAAP approach compatible with IFRS?

Our analysis suggests that in certain circumstances IFRS could result in a different accounting treatment from that required under US GAAP.

It is also essential for reporters under IFRS to ensure that the accounting treatment adopted is supported by the underlying substance of the arrangement and to supplement this with appropriate disclosures.

The question of discounts when applying the residual method

Context

It is very difficult – if not impossible – to determine vendor-specific objective evidence of fair value for the license element under SOP 97-2, as this element is rarely sold separately, as noted above. And if there is no VSOE, no revenue can be recognised. The adverse reaction to this measure led US standard-setters to revisit the issue. SOP 97-2 was acknowledged to have been too rigid and was partially amended with the issuance of SOP 98-9, which introduced the residual method.

Brief summary of the US GAAP approach

The residual method allows revenue to be recognised for a delivered element with no VSOE of fair value if, and only if, there is VSOE of fair value for all undelivered elements. In such cases, revenue can be recognised on the delivered item, the amount recognised being the difference between the total arrangement fee (i.e., the total price of all elements in the contract) and the sum of the specific fair values of the undelivered elements.

This represents an exception to the principle underlying SOP 97-2, which was to allocate revenue in proportion to the fair value of each element. The residual method therefore has the effect of allocating all discounts to the delivered element, rather than apportioning the discount among all the elements. Take the example of a software

company offering a contract, which sells a license (for which there is no VSOE) for €100 with one year's PCS and a renewal rate of PCS fixed at €20 (20%) at the end of the first year (giving a fair value of €20 for the PCS element). Under the residual method, the software company will be able to recognise €80 when the license is delivered (total contract price of €100 less the €20 fair value of the undelivered element).

Comparative analysis of the IFRS approach

While it might be acceptable for a company to justify recognising the revenue on a delivered element as the difference between the total contract price and the fair value of the undelivered elements, this is not the only acceptable method under IFRS. However, one could question the allocation of the entire discount to the delivered element as a direct consequence of the application of the residual method. Indeed, we could think of a way in which the known discount on the undelivered element, if any, could be spread among both the undelivered and the delivered elements. Because, by definition, the fair value is not known for the delivered element (otherwise the residual method would not be applicable), one possible way to do this would be to allocate the discount in proportion of the fair value of the undelivered elements and of the residual amount determined for the delivered element.

In the example above, this would have the consequence of allocating the €20 discount on the PCS both on the delivered license element and on the undelivered PCS element, 84% of it allocated to the delivered license element and 16% allocated to the PCS.

Applying the residual method and then apportioning the discount among delivered and undelivered elements would result in recognition of €84 of revenue on delivery of the software, whereas the residual method alone would restrict the amount of revenue recognised upon delivery of the license to €80.

Is the US GAAP approach compatible with IFRS?

The residual method, though allowing companies to start recognising a portion of revenue even if there is no objective evidence of fair value for the delivered element, has the effect of allocating the entire discount to the delivered element. A method that seeks to allocate the discount among all the elements, whether delivered or undelivered, may be investigated as a possible alternative under IFRS.

Conclusion

Non-US software companies filing accounts under IFRS may wish to consider whether their accounting policy and narrative disclosures provide all and appropriate information to investors to maximise value – particularly where those investors' expectations remain conditioned by US GAAP.

Furthermore, software vendors should beware of assuming that compliance with the more detailed and onerous requirements of US GAAP ensures compliance with IFRS. This will not necessarily be the case.

Should the potential changes regarding adoption of IFRS by US companies that are now under discussion be realised, the landscape of international accounting will be significantly altered, perhaps soon. Software companies would be well advised to take the time to understand the possible implications of these changes.

Acknowledgments

This paper was developed with the support and expertise from staff members from around our firm. A core group of PricewaterhouseCoopers staff worked diligently to produce this publication. We would like to thank the French firm for its leadership and technical consulting on the positions detailed in this paper as well as the US and UK firms, without which this paper would not have been published. Our team members include:

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