Project	**Revenue Recognition**
Topic	**Revenue recognition for services**

Purpose and summary of staff recommendations

1. An entity must follow two steps to recognize revenue for a service. First an entity must determine that a performance obligation is satisfied continuously. Second, the entity must select a revenue recognition method to measure its progress toward complete satisfaction of the performance obligation. The Boards discussed those two steps in January 2011 and asked the staff to prepare this paper to clarify how an entity would apply them.

Step 1: Determining whether a performance obligation is satisfied continuously

2. In January, the Boards discussed three criteria that an entity would use to determine whether an entity satisfies a performance obligation continuously. At the Boards' request, the staff has further analyzed those criteria and recommends they be revised as follows:

3. An entity satisfies a performance obligation continuously if at least one of the following two criteria is met:

    (a) The entity's performance creates or enhances an asset that the customer controls, or

    (b) The entity's performance does not create an asset with alternative use to the entity and at least one of the following is met:

(i) the customer immediately receives a benefit from each task that the entity performs, or

(ii) another entity would not need to reperform the task(s) performed to date if that other entity were to fulfil the remaining obligation to the customer, or

(iii) the entity has a right to payment for performance to date even if the customer could cancel the contract for convenience.

Step 2: Measuring progress toward complete satisfaction of a performance obligation

4. To clarify how to measure progress toward complete satisfaction of a performance obligation, the staff recommends that the final revenue standard carry forward much of the proposed guidance in the Exposure Draft and:

   (a) emphasize that the objective of measuring progress is to faithfully depict the entity's performance (i.e. the goods or services transferred to a customer), and

   (b) enhance the description of output and input methods using feedback from the comment letters and existing requirements.

5. With respect to a single performance obligation for non-distinct goods (e.g. uninstalled materials) transferred at a different time from non-distinct services (e.g. installation), the staff recommends that an entity should measure progress toward completion by recognizing revenue for the transfer of those goods in an amount equal to the costs of the transferred goods.

Structure of this paper

6. This paper is organized as follows:

   (a) Determining whether a performance obligation is satisfied continuously (paragraphs 7–30)

   (b) Measuring progress toward complete satisfaction of a performance obligation (paragraphs 31–50)

   (c) Measuring progress for uninstalled materials (paragraphs 53–57)

   (d) An entity's ability to reasonably measure progress (paragraphs 58–62)

   (e) Appendix A: Exposure Draft's proposed guidance on continuous transfer of goods or services

   (f) Appendix B: Existing requirements on measuring progress

Determining whether a performance obligation is satisfied continuously

Background

7. In the Exposure Draft, *Revenue from Contracts with Customers,* the Boards proposed that a good or service is transferred when the customer obtains control of the good or service. As noted in the January 2011 Agenda Paper 6A / Memo 135A *Determining the transfer of goods and services*, respondents to the Exposure Draft overwhelmingly thought that the proposed control guidance was insufficient for services and would lead to significant diversity in practice.

8. Because of those concerns, the Boards decided in January 2011 to develop additional guidance to help an entity determine whether a performance obligation is satisfied continuously. The Boards decided tentatively that a performance obligation is satisfied continuously only if at least one of the following criteria is met:

   (a) The customer controls the work-in-process, or

(b) Another entity would not need to reperform the task(s) if that other entity were required to fulfill the remaining obligation to the customer, or

(c) The entity has a right to payment for the performed task(s) and the entity's performance to date does not have an alternative use to the entity (that is, the performance to date has not created an asset that could be transferred to another customer).

9. The Boards asked the staff to develop those criteria further and to evaluate whether they would be sufficient to help an entity determine whether a performance obligation is satisfied continuously. Consequently, the staff reached out to some preparers and auditors (from both a public and a non-public perspective) to obtain feedback on the tentative criteria.

10. Respondents to that outreach indicated support for the overall direction of the proposed criteria but had the following concerns and questions:

Criterion	**Questions and comment**	**Paragraph in this paper that addresses the question/concern**
(a) The customer controls the work-in-process, or	Is control intended to mean the same as control of a good?	Paragraph 18
	Does the work-in-process have to be tangible?	Paragraph 15
(b) Another entity would not need to reperform the task(s) if that other entity were required to fulfill the remaining obligation to the customer, or	It is not clear how this criterion relates to the evaluation of whether the customer controls the work-in-process. If the contract has work-in-process, this criterion is not necessary if the customer controls the work-in-process.	Paragraph 12
	What if the contract precludes the entity from transferring the obligation to another	Paragraph 25

	entity? What if it would be very costly for another entity to assume and fulfil the remaining obligation to the customer?	 Paragraph 26
(c) The entity has a right to payment for the performed task(s) and the entity's performance to date does not have an alternative use to the entity	What is meant by the right to payment? Must that amount be fixed? What if the customer can terminate the contract for convenience?	Paragraph 28 Paragraph 28

Revised criteria for identifying a performance obligation that is satisfied continuously

11. On the basis of responses to the Exposure Draft and the additional feedback from recent outreach, the staff has revised the tentative criteria and recommends that a performance obligation is satisfied continuously if either of the following two criteria is met:

    (a) The entity's performance creates or enhances an asset that the customer controls, or

    (b) The entity's performance does not create an asset with alternative use to the entity and at least one of the following is met:

        (i) the customer immediately receives a benefit from each task that the entity performs, or

        (ii) another entity would not need to reperform the task(s) performed to date if that other entity were to fulfil the remaining obligation to the customer, or

        (iii) the entity has a right to payment for performance to date even if the customer could cancel the contract for convenience.

12. The criteria have been divided into two categories—one for when the entity's performance creates or enhances an asset of the customer and another for when the entity's performance does not create an asset with alternative use to the entity. The primary reason for that change of structure was to address concerns about the interaction between the reperformance criterion and the criterion on whether the customer controls any work-in-process. The reperformance criterion is redundant for contracts with work-in-process because if a customer controls the work-in-process, another entity would not need to reperform any task(s) performed to date. The staff thinks the revised structure is less confusing and easier to apply.

13. All of the criteria above assume that the entity is performing a task or tasks on behalf of a customer in accordance with a contract that the parties to the contract intend and are able to fulfil.

14. The following paragraphs explain each of those criteria.

The entity's performance to date creates or enhances an asset of the customer

15. An entity would satisfy its performance obligation continuously if the entity's performance creates or enhances an asset that the customer controls. That would be the case if the customer controls any work-in-process (tangible or intangible) as it is created by the entity's performance. Most construction contracts would meet this criterion.

16. This criterion also is consistent with the Exposure Draft's proposed implementation guidance on determining whether a good or service is transferred continuously. That guidance stated that goods or services would be transferred continuously if the customer controls the work-in-process as it is built. Most respondents agreed with that concept.

17. That concept also is consistent with the basis for percentage-of-completion accounting in accordance with existing requirements in U.S. GAAP:

> Under most contracts for construction of facilities, production of goods, or provision of related services to a buyer's specifications, both the buyer and the seller (contractor) obtain enforceable

> rights. The legal right of the buyer to require specific performance of the contract means that the contractor has, in effect, agreed to sell his rights to work-in-progress as the work progresses. This view is consistent with the contractor's legal rights; he typically has no ownership claim to the work-in-progress but has lien rights. Furthermore, the contractor has the right to require the buyer, under most financing arrangements, to make progress payments to support his ownership investment and to approve the facilities constructed (or goods produced or services performed) to date if they meet the contract requirements. The buyer's right to take over the work-in-progress at his option (usually with a penalty) provides additional evidence to support that view. Accordingly, the business activity taking place supports the concept that in an economic sense performance is, in effect, a continuous sale (transfer of ownership rights) that occurs as the work progresses.

18. An entity would consider all of the guidance on control in the revenue standard to determine whether the customer controls any asset created or enhanced by the entity's performance.

The entity's performance does not create an asset with alternative use to the entity

19. If an entity's performance does not create or enhance an asset that the customer controls, the entity would need to determine whether the entity's performance to date has created an asset with alternative use to the entity. This criterion is necessary but not sufficient—i.e. an entity also must meet at least one of the three criteria in paragraph 11(b).

20. An asset with alternative use to an entity is an asset that the entity could readily direct to another customer. An entity should use judgment and consider all facts and circumstances when evaluating whether the entity could readily direct an asset to another customer. In making that evaluation, an entity would consider the terms of the contract and also should consider the costs and consequences to the entity of directing the asset to another customer (e.g. whether the entity would incur significant costs to re-work the asset for the other customer or whether directing the asset to another customer would result in breach of a contract).

21. In many cases, an asset will have an alternative use because it is a standard inventory-type item and an entity has discretion to substitute the item across contracts with customers. Conversely, if an entity creates an asset that is highly customized for a particular customer, then the asset would be less likely to have an alternative use because the entity likely would incur significant costs to re-configure the asset for sale to another customer (or would need to sell the asset for a significantly reduced price).

22. Existing requirements for construction, software and real estate focus on the level of customization of an asset to determine whether it is transferred continuously. In many cases, those requirements are applied in a way that appropriately depicts the transfer of goods or services to a customer. Hence, the level of customization might be a helpful factor to consider when evaluating whether an asset has an alternative use. However, it is not determinative because in some cases (e.g. some real estate or some manufacturing contracts), an asset might be standardized but still might not have an alternative use to an entity because the entity cannot direct the asset to another customer.

23. Consider the following examples:

> **Manufacturing service (continuous)**
> An entity promises to manufacture an asset to the specifications provided by a customer. The asset could be used by other customers but only if the entity incurred significant costs to reconfigure the asset. Hence, the asset does not have alternative use to the entity and the entity satisfies its performance obligation to the customer continuously.
>
> **Automobile manufacturer (not continuous)**
> An automobile manufacturer promises to manufacture an automobile to the specifications provided by a customer. The entity could readily direct the automobile to another customer and begin production on another automobile with the same specifications. Hence, the asset has alternative use to the entity and the entity does not satisfy its performance obligation to the customer continuously.

The customer receives immediate benefit from each task that the entity performs

24. In many cases, the customer immediately receives a benefit as the entity performs each task. In those cases, the entity satisfies its performance obligation continuously (assuming the entity's performance has not created an asset with alternative use to the entity). For example, consider an entity that promises to process transactions on behalf of a customer. The entity's processing of each transaction does not create an asset with alternative use to the entity. And the customer immediately receives a benefit as each transaction is processed. Consequently, the entity would satisfy its performance obligation continuously as it processes transactions for the customer.

Another entity would not need to reperform the task(s) performed to date if that other entity were to fulfil the remaining obligation to the customer

25. To apply this criterion, it is not necessary that the contract permit an entity to transfer a performance obligation to another entity. That is, applying this criterion is unconstrained by contractual or practical limitations.

26. When considering whether another entity would need to reperform any tasks, it is necessary to focus on whether a performance obligation is being satisfied continuously without regard to other issues such as the creation of any assets related to the contract (e.g. inventory), or the measurement of the performance obligation.

27. Consider the following examples:

> **Transportation services (continuous)**
> A shipping company enters into a contract to ship a customer's asset from California to New York. If the company transports the asset halfway to its destination, another shipping company could fulfil the remaining obligation to the customer without having to re-perform the shipping services provided to date (even if the obligation could not be transferred legally or if it would be unlikely because of the cost of changing vendors). Hence, the shipping service would be a performance obligation that is satisfied continuously under this criterion.

Set up activities (not continuous)
An entity promises to provide payroll processing services for a customer. The entity performs various tasks to set up the payroll process. If another entity were to fulfil the remaining obligation to the customer, that other entity would need to reperform the tasks of setting up payroll. Hence, the set-up activity would not be a performance obligation that is satisfied continuously.

The entity has a right to payment for performance to date even if the customer could cancel the contract for convenience

28. An entity would satisfy its performance obligation continuously if the entity has a right to payment for performance to date (and assuming that performance has not created an asset with alternative use). The right to payment does not necessarily need to be for an amount that is fixed. However, the entity must have a right to an amount that is intended to compensate the entity for performance to date even if the customer can terminate for convenience (i.e. for reasons other than the entity's failure to perform as promised). Compensation for performance to date includes payment for recovery of the entity's costs plus a reasonable profit margin rather than compensation for the entity's potential loss of profit if the customer cancels the contract.

29. Many respondents to the Exposure Draft suggested this criterion. One respondent noted:

> In our industry, certain contracts contain a "termination for convenience provision under which the customer is obligated to pay for all incurred costs and a profit element if the contract is cancelled by the customer for reasons other than contractor default. We believe the presence of such contractual language meets the Exposure Draft s requirement for the transfer of control in that (a) there is an unconditional promise to pay and (b) the design or function of the product is customer specific. We also believe control can be transferred in certain circumstances even in the absence of termination of convenience language in the contract. We recommend that the Boards add other indicative factors of transfer of control to the Exposure Draft, namely when the customer possesses the right to take physical control of the goods, and/or the goods or services are not transferrable to another customer due to their customization, both of which

support that a customer possesses effective control throughout the construction period. [Comment Letter No. 458 from Lockheed Martin]

Criteria versus indicators

30. The staff considered whether the revenue standard should provide criteria or indicators that a performance obligation is satisfied continuously. Most respondents (both to the Exposure Draft and to recent consultations) suggest indicators rather than criteria. However, the staff thinks that each of the proposed criteria is determinative of a continuous transfer and is consistent with the core principle of the proposed model. Changing the criteria to indicators could result in an entity concluding that a performance obligation is being satisfied continuously on the basis of activities of the entity rather than the transfer of goods or services.

Question for the Boards

Question 1: Continuous satisfaction of a performance obligation
The staff recommends that an entity satisfies a performance obligation continuously if at least one of the following two criteria is met: (a) The entity’s performance creates or enhances an asset that the customer controls, or (b) The entity's performance does not create an asset with alternative use to the entity and at least one of the following is met: (i) the customer immediately receives a benefit from each task that the entity performs, or (ii) another entity would not need to reperform the task(s) performed to date if that other entity were to fulfil the remaining obligation to the customer, or (iii) the entity has a right to payment for performance to date even if the customer could cancel the contract for convenience. Do the Boards agree?

Measuring progress toward complete satisfaction of a performance obligation

31. After determining that a performance obligation is satisfied continuously, an entity would recognize revenue by selecting a method to measure the progress toward completion of the performance obligation. At the January 2011 meeting, the Boards asked the staff to analyze further how an entity would select a method.

32. There are various methods an entity might use to measure its progress toward complete satisfaction of a performance obligation. Because of the breadth of scope of the revenue project, it is not possible for the Boards to consider all possible methods and prescribe when an entity should use each method. An entity would be required to use judgment when selecting an appropriate method. However, that does not mean that an entity would have "free choice" when selecting a method of measuring progress.

33. In accordance with the Exposure Draft, an entity would be required to select a method that is consistent with a clear objective and to use that method consistently in similar circumstances. Appendix A includes the requirements proposed in the Exposure Draft. The remainder of this paper considers improvements to those proposals.

Objective when selecting a method of measuring progress

34. The Exposure Draft stated that the objective of measuring progress is to recognize revenue in a way that best depicts the transfer of goods or services (i.e. the entity's performance). Respondents to the Exposure Draft generally agreed that the objective of measuring progress is to depict the entity's performance under the contract. In addition, that objective is consistent with existing standards and the core principle of the proposed revenue recognition model. Hence, the staff thinks the final standard should emphasize and clarify, but should not change, the objective of measuring progress.

35. In some contracts, the measure of progress that is most consistent with that objective may coincide with the entity's rights to payment from the customer. That is, the customer might be obliged to pay an amount of consideration that is commensurate with each incremental good or service that the entity transfers to the customer. In those contracts, recognizing revenue as the customer pays (or is obliged to pay) would be consistent with the objective of measuring progress because each customer payment reflects the amount of consideration the entity receives or expects to receive in exchange for the goods or services transferred to the customer. An example of that type of contract is a time-and-materials contract or another similar contract in which the total quantity of goods or services is uncertain but the customer agrees to pay a fixed price per incremental good or service.

36. For other contracts, an entity would be required to use judgment to select a method (i.e. an output or an input method) that is most consistent with the objective of measuring progess. To help in the selection of an appropriate method, many respondents asked the Boards to consider carrying forward the guidance in existing requirements on measuring progress of a construction contract. Appendix B includes those requirements.

37. The staff agrees with those respondents and thinks the proposed requirements could be improved by further describing the respective advantages and disadvantages of an output method and an input method. Methods based on the passage of time are a practical way of applying either an output or an input method when an entity performs evenly over time. Consequently, time-based methods are not discussed separately in the following sections.

Output methods

38. Output methods measure an entity's performance directly on the basis of results achieved. If an entity's performance results in the production of tangible units, a common output method is to recognize revenue on the basis of units delivered to a

customer.[1] Other output methods include methods based on units produced, contract milestones, value added, and surveys of work performed.

39. Consistent with existing requirements, the Exposure Draft noted that output methods often result in the most faithful depiction of the transfer of goods or services to a customer. Some respondents agreed with that proposal in concept but thought that the Exposure Draft did not sufficiently describe the advantages and disadvantages of alternative methods. For example, one respondent noted:

> We also agree conceptually that when they can be established and monitored objectively and reliably, output measures are the most direct measure of progress toward completion. However, input measures, particularly costs incurred, are the practical, predominant measure of progress used by us today, as they faithfully reflect the underlying economics of a continuous transfer of control model. This view aligns with paragraph BC74 of the ED, which specifies that an entity should select a revenue recognition method that best depicts the entity's performance under the contract. We believe this concept should be given more prominence in the proposed standard and suggest that the Board adopt language similar to that in ASC 605-35, paragraph 25-71, which explains the drawbacks and advantages of both output and input measures. [Comment Letter No. 132 from Raytheon]

40. Other respondents thought the Exposure Draft was too biased toward output methods and asked the Boards to remove the stated preference for output methods. Those respondents thought that the Exposure Draft would require an entity to select a units of delivery method even when it would not faithfully depict the transfer of goods or services to the customer.

41. Several respondents provided an example similar to the one in the following quote:

> Consider an arrangement to design and construct twenty units. Assume the contract will take five years and that several units are produced simultaneously. Further assume that design and construction are considered to be an integrated performance

[1] If an entity incurs significantly higher costs in producing the first unit relative to the last unit, the entity might recognize an asset from setting up a production process that creates a resource to be used in producing future units under the contract. The Boards will discuss that issue further in March.

> obligation that is delivered over time in a continuous fashion. The customer will make progress payments based on costs incurred to date plus a predetermined margin as construction progresses and the vendor has little discretion but to deliver the particular units in construction upon contract completion. Following the statement that output measures represent the "best" means of depicting performance might result in a conclusion that all revenue should be deferred until completed units are delivered, which might be late in the contract lifecycle. That method of revenue recognition would be consistent with a "units produced" output measure, but we believe most people would argue that "units produced" is not the best method of depicting performance if the substance of the arrangement is a design and construction service with payments commensurate with performance. A "cost to cost" or "hours to hours" inputs-based measure of performance seems to better reflect the economics of the arrangement. [Comment Letter No. 418 from KPMG]

42. The staff agrees with those respondents who noted that a units of delivery method is not always the best depiction of the entity's performance. In an example like the one in the preceding quote, it was not the Boards' intention to require that the entity select a units of delivery method. That method would not depict the continuous transfer of design and manufacturing services (although a units of delivery method might appropriately depict an entity's performance in other contracts). Hence, the staff thinks the final standard should emphasize the objective of measuring progress and clarify what is meant by an output.

43. An output of an entity's performance is the value of the goods or services transferred to the customer. An output method directly measures an entity's past performance (or the results of the entity's past performance). That measure might be obtained through surveys, appraisals, or valuations of the goods or services transferred to date.

44. The primary disadvantage of an output method is that in many cases an entity cannot directly observe measures of output without incurring significant costs (or in some cases an output measure might not be reliable). Some respondents to the

Exposure Draft expressed concerns about the potential costs if an output method were required in all circumstances.

45. One respondent noted:

> I understand different output methods may be used for various performance obligations. One of those methods is an engineering audit. I could not begin to estimate the cost of that to our company but I suspect, based on other professional fees we pay, that any requirements of that nature would either make us lose money on the obligation or require the costs to be passed to the owner. There is not much work available now and I believe any increase in costs will further reduce commercial construction projects. [Comment Letter No. 5 from Indy Walls & Ceilings Inc]

46. The staff agrees that output measures can be unnecessarily costly for an entity to obtain. Hence, in many contracts an entity would select an input method to measure its progress toward complete satisfaction of a performance obligation. But that would be on the basis that an output measure conceptually is a better depiction, but fails a cost-benefit test (or in some cases an input method may be a more reliable proxy of the outputs to the customer).

Input methods

47. Input methods measure an entity's performance indirectly in terms of efforts or resources consumed relative to total efforts or resources expected to be consumed. An entity could measure various inputs including costs, labour hours, labour dollars, machine hours, or quantities of materials. A cost-based input method is the most common method used in current practice.

48. The Exposure Draft proposed that when using an input method, an entity would measure progress by including all inputs that depict the transfer of goods or services to the customer (i.e. the entity's performance). If using a cost-based input

method, many respondents supported including the costs described in paragraph 58 of the Exposure Draft:[2]

> 58. Costs that relate directly to a contract are:
>
> (a) direct labor (for example, salaries and wages of employees who provide services directly to the customer);
>
> (b) direct materials (for example, supplies used in providing services to the customer);
>
> (c) allocations of costs that relate directly to the contract or contract activities (for example, costs of contract management, and depreciation of tools and equipment used in fulfilling the contract);
>
> (d) costs that are explicitly chargeable to the customer under the contract; and
>
> (e) other costs that were incurred only because the entity entered into the contract (for example, subcontractor costs).

49. Conversely, in accordance with the Exposure Draft an entity would exclude any costs that do not depict the transfer of goods or services to the customer (e.g. the costs of abnormal amounts of wasted materials, labor, or other resources to fulfill the contract). Some respondents questioned the Exposure Draft's proposal to exclude costs of "abnormal" amounts of wasted resources used to fulfil a contract. One respondent noted:

> …there are often inefficiencies, trial and error, and rework required with a certain amount of this included in the estimated cost of the project. I believe that the guidance should be expanded to allow the costs of routine inefficiencies and minor rework to be included in the actual and estimated cost of fulfilling the performance obligations where an input method is chosen as these costs are not considered abnormal. [Comment Letter No. 249 from Lane Construction]

50. The staff thinks the proposals could be improved by clarifying that abnormal costs are those that were not originally planned or budgeted in the contract. Also, the

[2] The description of costs in paragraph 58 of the Exposure Draft was in the context of recognizing an asset from costs of fulfilling a contract (rather than in the context of measuring progress). The Boards will consider further that description when discussing the accounting for fulfillment costs in March.

notion of "abnormal" costs is consistent with the notion in the context of inventory accounting and also with existing requirements that similarly require an entity to disregard some inputs when measuring progress if those inputs are due to "inefficiencies" rather than the entity's performance.

51. The staff thinks that the final revenue standard should further explain the advantages and disadvantages of an input method. However, the staff thinks the final revenue standard should not be too prescriptive of which inputs an entity should include or exclude. Rather, the standard should carry forward the objective from the Exposure Draft and enhance the description of output and input methods using feedback from the comment letters and existing requirements.

52. In addition, the staff notes that the Exposure Draft would require that an entity disclose the methods it uses to measure progress for a performance obligation that is satisfied continuously including a description of why that method is the best depiction of the entity's performance. That proposal should be carried forward into the final standard.

Question for the Boards

Question 2: Measuring progress toward completion
The staff recommends that to clarify how to measure progress toward complete satisfaction of a performance obligation, the final revenue standard should carry forward much of the proposed guidance in the Exposure Draft and: (a) emphasize that the objective of measuring progress is to faithfully depict the entity's performance (i.e. the goods or services transferred to a customer), and (b) enhance the description of output and input methods using feedback from the comment letters and existing requirements. Do the Boards agree?

Measuring progress for uninstalled materials

53. In some contracts, an entity promises to transfer both goods and services to the customer and the goods are transferred at a different time from the services. In those contracts, the entity first must decide whether the goods and services are distinct. If so, the entity would identify separate performance obligations and allocate consideration to each.

54. If the goods and services are not distinct, then the entity would account for the bundle as a single performance obligation that is continuously satisfied. The staff has observed significant diversity in practice on how to measure progress in those situations and is seeking the Boards' views on the issue. In the construction industry, this issue arise frequently with significant "uninstalled" or "permanent" materials (e.g. turbine, steel).

55. Consider the following example:

> A contractor enters into a contract to build a power plant for a customer. Among other things, the contract specifies the turbine that the entity must procure and install at the plant. The contract is a single performance obligation that is satisfied continuously.
>
> The contract price is CU120m.
>
> The entity estimates that the total contract costs are CU100m. The cost to procure the turbine is CU40m. The remaining CU60m costs relate to the other materials and labour to design and build the power plant and to install the turbine.
>
> At the end of the reporting period, the entity has delivered the turbine to the site and the customer has obtained control of it. Installation of the turbine is expected to commence in the following reporting period.

56. The contractor must select a method of measuring progress for the single performance obligation (including the transferred turbine). In current practice, an entity might select any one of the following three methods to measure progress.

(a) A labour-hours input method of measuring progress. Under this measure of progress, the contractor would not recognize any revenue for transferring the turbine. Rather, the contractor would recognize inventory from the costs of the turbine (even though the customer controls the inventory). That inventory would be derecognized and the contractor would recognize revenue only as the contractor expends labour hours to install the turbine. That is, the pattern of revenue recognition would be on the basis of labour hours incurred relative to total labour hours expected to be incurred.

(b) A cost-based input method that results in the recognition of a contract-wide profit margin for transferring the turbine. Proponents of this method think that the entity has performed by procuring and transferring the turbine (even though it has not yet been installed). They think that the cost of the turbine should be accounted for similarly to any other cost in the contract that drives contract-wide profit margin. The profit margin should be the same for the turbine as for all other materials and labour because the entity already has concluded that the goods and services are not distinct.

(c) A modified cost-based method of measuring progress that results in the entity recognizing revenue for the transfer of the turbine in an amount equal to the costs of the turbine. Under this method, the entity would recognize revenue for the turbine because the customer controls it. However, the entity would not recognize a profit margin for procuring and transferring the turbine because it would overstate the entity's performance (i.e. the entity has not yet performed the installation service that is required to recognize the related profit margin).

57. The staff recommends method (c) for uninstalled materials because method (a) would recognize inventory from the costs of an asset that the entity does not control, which contradicts the core principle of the revenue model. Moreover, the staff thinks that under method (b), it is not appropriate for an entity to recognize a

contract-wide profit margin when the entity has not performed and the entity still has all of the risks associated with installing the materials.

Question for the Boards

Question 3: Measuring progress for uninstalled materials
With respect to a single performance obligation for non-distinct goods (e.g. uninstalled materials) transferred at a different time from non-distinct services (e.g. installation), the staff recommends that an entity should measure progress toward completion by recognizing revenue for the transfer of those goods in an amount equal to the costs of the transferred goods. Do the Boards agree?

An entity's ability to reasonably measure progress

58. In January 2011, the Boards decided that an entity would recognize revenue for a service only if the entity can reasonably measure its progress toward complete satisfaction of a performance obligation. That decision is consistent with existing requirements. This section of the paper further analyzes the consequences of the Boards' tentative decision in January, but does not contain an additional question for the Boards.

59. An entity would be required to use judgment when determining whether it can reasonably measure its progress toward completion. In making that determination, the entity must consider whether it has access to the information that would be required to apply an output method or an input method. In some cases, that information will not be available to an entity until a critical event occurs in the future. Hence, the entity would not recognize revenue until the occurrence or achievement of that event.

60. Consider the following contrasting examples:

Real estate agent
A real estate agent promises to provide property-search services to a client

for six months. The amount and timing of services are at the discretion of the client. Because of the significant uncertainty about the amount and timing of the services, the agent cannot reasonably measure the progress toward completion of the contract. Output methods are not available and the agent does not have the information to reasonably measure the total inputs required for the client to find a satisfactory property. Hence, the agent would not recognize revenue until the closing on a property.

Consultant
A consultant promises to provide a business strategy report to a client in exchange for a fixed fee. To provide the report, the consultant is required to provide services continuously for six months. The consultant can reasonably estimate the total number of labour hours required to provide the report. Hence, the consultant would measure progress toward completion of the performance obligation using a labor-hours input method rather than waiting until the report is delivered.

61. As discussed in January, in some cases an entity might not be able to reasonably measure the amount of profit for a contract. However, the entity might be reasonably assured that a loss will not be incurred. In those cases, the staff thinks that it would be appropriate for an entity to recognize revenue continuously, but without recognizing a profit margin. That method is consistent with existing requirements (IAS 11, IAS 18, and ASC 605-35) on measuring progress. Recognizing revenue to the extent of costs incurred might be appropriate in the early stages of a long-term contract when an entity can reasonably estimate the maximum amount of costs to be incurred on a contract but cannot reasonably estimate the profit margin.

62. The Boards asked the staff to further clarify how that “zero margin” approach relates to measuring progress. To clarify, consider the following example:

Maintenance services
An entity promises to provide one year of equipment maintenance services to a customer for a fixed price of CU100. The entity incurs actual costs of CU50 and is reasonably assured that the contract will not be loss-making. However, the entity cannot reasonable estimate the profit margin, if any, for the contract. The entity recognizes revenue at an amount equal to the incurred costs which, in effect, is as if the entity were to select a cost-based input method of measuring progress with an estimate of total costs equal to the transaction price of CU100. Hence, after incurring CU50 of actual

costs, the entity estimates that the contract is 50% complete (CU50 actual costs ÷ CU100 estimated total costs) and recognizes revenue of CU50 (50% completion × CU100 transaction price).

Appendix A: Exposure Draft's proposed guidance on continuous transfer of goods or services

A1. Paragraphs 32 and 33 of the Exposure Draft state the following:

> 32. When the promised goods or services underlying a separate performance obligation are transferred to a customer continuously, an entity shall apply to that performance obligation one revenue recognition method that best depicts the transfer of goods or services to the customer. The entity shall apply that method consistently to similar performance obligations and in similar circumstances.
>
> 33. Suitable methods of recognizing revenue to depict the continuous transfer of goods or services to the customer include the following:
>
> (a) output methods that recognize revenue on the basis of units produced or delivered, contract milestones, or surveys of goods or services transferred to date relative to the total goods or services to be transferred. Output methods often result in the most faithful depiction of the transfer of goods or services. However, other methods may also provide a faithful depiction but at a lower cost.
>
> (b) input methods that recognize revenue on the basis of efforts expended to date (for example, costs of resources consumed, labor hours expended, and machine hours used) relative to total efforts expected to be expended. Inputs often are more directly observable than outputs. However, a significant drawback of input methods is that there may not be a direct relationship between the efforts expended and the transfer of goods or services because of deficiencies in the entity's performance or other factors. When using an input method, an entity shall exclude the effects of any inputs that do not depict the transfer of goods or services to the customer (for example, the costs of abnormal amounts of wasted materials, labor, or other resources to fulfill the contract).
>
> (c) methods based on the passage of time. An entity would recognize revenue on a straight-line basis over the expected duration of the contract if services are transferred evenly over time (for example, as in some licenses).

Appendix B: Existing requirements on measuring progress

B1. ASC Subtopic 605-35 on construction-type and production-type contracts states:

> **Input and Output Measures**

25-70 The approaches to measuring progress on a contract can be grouped into input and output measures. Input measures are made in terms of efforts devoted to a contract. They include the methods based on costs and on efforts expended. Output measures are made in terms of results achieved. They include methods based on units produced, units delivered, contract milestones, and value added. For contracts under which separate units of output are produced, progress can be measured on the basis of units of work completed. In other circumstances, progress may be measured, for example, on the basis of cubic yards of excavation for foundation contracts or on the basis of cubic yards of pavement laid for highway contracts.

25-71 Both input and output measures have drawbacks in some circumstances. Input is used to measure progress toward completion indirectly, based on an established or assumed relationship between a unit of input and productivity. A significant drawback of input measures is that the relationship of the measures to productivity may not hold, because of inefficiencies or other factors. Output is used to measure results directly and is generally the best measure of progress toward completion in circumstances in which a reliable measure of output can be established. However, output measures often cannot be established, and input measures must then be used. The use of either type of measure requires the exercise of judgment and the careful tailoring of the measure to the circumstances.

25-72 The efforts-expended method is an input method based on a measure of the work, such as labor hours, labor dollars, machine hours, or material quantities. Under the labor-hours method, for example, extent of progress is measured by the ratio of hours performed to date to estimated total hours at completion. Estimated total labor hours shall include both of the following:

a. The estimated labor hours of the contractor

b. The estimated labor hours of subcontractors engaged to perform work for the project, if labor hours of subcontractors are a significant element in the performance of the contract.

25-73 A labor-hours method can measure the extent of progress in terms of efforts expended only if substantial efforts of subcontractors are included in the computation. If the contractor is unable to obtain reasonably dependable estimates of subcontractors' labor hours at the beginning of the project and as work progresses, the contractor should not use the labor-hours method.

25-74 The various forms of the efforts-expended method generally are based on the assumption that profits on contracts are derived from the contractor's efforts in all phases of operations, such as designing, procurement, and management. Profit is not assumed to accrue merely as a result of the acquisition of material or other tangible items used in the performance of the contract or the awarding of subcontracts. As previously noted, a significant drawback of efforts-expended methods is that the efforts included in the measure may not all be productive.

25-75 Measuring progress toward completion based on the ratio of costs incurred to total estimated costs is also an input method. Some of the costs incurred, particularly in the early stages of the contract, shall be disregarded in applying this method because they do not relate to contract performance. These include the costs of items such as uninstalled materials not specifically produced or fabricated for the project or of subcontracts that have not been performed. For example, for construction projects, the cost of materials not unique to the project that have been purchased or accumulated at job sites but that have not been physically installed do not relate to performance. The costs of such materials should be excluded from costs incurred for the purpose of measuring the extent of progress toward completion.

25-76 The cost of uninstalled materials specifically produced, fabricated, or constructed for a project shall be included in the costs used to measure extent of progress. Such materials consist of items unique to a project that a manufacturer or supplier does not carry in inventory and that must be produced or altered to meet the specifications of the project.

25-77 Also, the cost of equipment purchased for use on a contract shall be allocated over the period of its expected use unless title to the equipment is transferred to the customer by terms of the contract. For production-type contracts, the complement of expensive components (for example, computers, engines, radars, and complex black boxes) to be installed into the deliverable items may aggregate a significant portion of the total cost of the contract. In some circumstances, the costs incurred for such components, even though the components were specifically purchased for the project, should not be included in the measurement before the components are installed if inclusion would tend to overstate the percentage of completion otherwise determinable.

25-78 The acceptability of the results of input or output measures deemed to be appropriate to the circumstances shall be reviewed and confirmed periodically by alternative measures that involve observation and inspection. For example, the results provided by the measure used to determine the extent of progress may be compared to the results of calculations based on physical observations by engineers, architects, or similarly qualified personnel. That type of review provides assurance somewhat similar to that provided for perpetual inventory records by periodic physical inventory counts.

> Methods of Measuring Extent of Progress Toward Completion

25-79 In practice, a number of methods are used to measure the extent of progress toward completion. Those practices, intended to conform to paragraphs 605-35-25-51 through 25-53, include all of the following:

a. The cost-to-cost method

b. Variations of the cost-to-cost method

c. Efforts-expended methods

d. The units-of-delivery method

e. The units-of-work-performed method.

25-80 Some of the measures are sometimes made and certified by engineers or architects, but management should review and understand the procedures used by those professionals.

> **25-81** Some methods used in practice measure progress toward completion in terms of costs, some in terms of units of work, and some in terms of values added (the contract value of total work performed to date). All three of these measures of progress are acceptable in appropriate circumstances. Other methods that achieve the objective of measuring extent of progress toward completion in terms of costs, units, or value added are also acceptable in appropriate circumstances. However, the method or methods selected shall be applied consistently to all contracts having similar characteristics. Examples of circumstances not appropriate to some methods are given within the discussion of input and output measures (see paragraphs 605-35-25-70 through 25-78).

B2. IAS 11 *Construction Contracts* paragraphs 30 and 31 state:

> 30 The stage of completion of a contract may be determined in a variety of ways. The entity uses the 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.
>
> 31 When the stage of completion is determined by reference to the contract costs incurred to date, only those contract costs that reflect work performed are included in costs incurred to date. Examples of contract costs which are excluded are:
>
> (a) contract costs that relate to future activity on the contract, such as costs of materials that have been delivered to a contract site or set aside for use in a contract but not yet installed, used or applied during contract performance, unless the materials have been made specially for the contract; and
>
> (b) payments made to subcontractors in advance of work performed under the subcontract.