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Project	<b>Revenue Recognition</b>
Topic	<b>Production costs under long-term production programs</b>

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## Introduction

1. This memo has been prepared in response to recent questions about the effect, if any, of the revenue project on how an entity should account for the costs of products manufactured for delivery under long-term production programs. Those questions have been raised as part of the revenue project because accounting for production costs affects the profit margin an entity recognizes upon fulfilment of a contract with a customer.
2. The accounting for costs to produce tangible units (transferred to a customer at a point in time) is not in the scope of the revenue project. Those costs relate to the accounting for inventory and intangible assets. There are significant differences between US GAAP and IFRSs when accounting for inventory and intangible assets. The Boards already have decided to not address those topics as part of the revenue project. Hence, this paper considers the issue but does not include a staff recommendation.
3. If the Boards decide to specify how an entity should account for the costs incurred to manufacture products, the staff thinks that should be done as part of a separate project that considers the accounting for inventory or intangible assets (or both).
4. This paper does not consider when and how much revenue an entity should recognize for products manufactured under long-term production programs. In current practice, the revenue an entity recognizes under a program is simply the

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This paper has been prepared by the technical staff of the IFRS Foundation and the FASB for discussion at a public meeting of the FASB or the IASB.

The views expressed in this paper are those of the staff preparing the paper. They do not purport to represent the views of any individual members of the FASB or the IASB.

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selling price of units completed and transferred to customers. The staff thinks that likely would be the same revenue accounting as under the proposed revenue model.

5. This paper is organized as follows:
  - (a) Background information (paragraphs 6–13)
  - (b) Effects of the revenue project on the accounting for production costs (paragraphs 14–19)
  - (c) Appendix A: Program accounting in US GAAP

**Background information**

6. Many manufacturers have programs for the production of units to be delivered to customers under existing and anticipated contracts. An entity would apply existing inventory guidance to account for the costs of units produced under those programs. Under that guidance, production costs typically are accounted for at the level of an individual unit, an individual contract, or a batch of units that are produced together (or as part of a single process).
7. However, for some production programs, costs are accumulated and allocated to cost of sales by program. A program consists of the estimated number of units of a product to be produced by an entity in a continuing, long-term production effort. Many entities allocate costs in a way that results in an average cost per unit. Other entities allocate costs in a way that results in an average profit margin per unit (see appendix A).
8. The need to account for production costs at the level of a program arises from the unique long-term nature of some production efforts. Most of the companies that account for production costs at the level of a program are in the Aerospace and Defense industry because of the nature of the products manufactured in that industry. The products manufactured in that industry include aircraft, aircraft

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engines, and parts for those products. Programs for those types of products can continue for decades.

9. Because of efficiencies and improvements in a production process over time (i.e. a learning curve), the costs to produce units early in a program can be significantly greater than the costs to produce units later in the program. Some entities recognize an asset from the production costs incurred in excess of amounts recognized as cost of sales.
10. For both US GAAP and IFRSs, a manufacturer recognizes incurred production costs (i.e. materials, labour, allocable overhead) as inventory. However, the amount recognized as cost of sales upon delivery of a completed unit can differ under existing US GAAP and IFRS requirements (and also by how entities apply each set of requirements).
11. The following table summarizes some of the diverse current practices in US GAAP and IFRSs when accounting for the costs of products manufactured for delivery under long-term production programs.

	<b>Recognition</b>	
	<b>during production</b>	<b>upon delivery of each unit</b>
<b>Entity A</b> US GAAP	Inventory (ASC 330)	- The expected margin for the total program - Asset (know-how)
<b>Entity B</b> IFRSs	Inventory ( IAS 2)	- Zero margin (cost of sales = revenue) - Asset (customer relationship)
<b>Entity C</b> IFRSs	Inventory ( IAS 2)	- Partial loss - Asset (know-how)
<b>Entity D</b> US GAAP	Inventory (ASC 330)	- Loss (carrying amount in excess of selling price) - No asset recognized

12. As the table above illustrates, some entities recognize a loss upon delivery of a unit to a customer because the carrying amount of an inventory unit exceeds the

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selling price for the unit. Other entities avoid recognizing a loss upon delivery by recognizing an asset that represents either of the following (although it sometimes is classified as “inventory” on the statement of financial position):

- (a) Know-how from producing past units that will benefit the production of units in the future, or
  - (b) A customer relationship that will provide benefit through future contracts for parts and services related to the delivered unit.
13. The staff thinks that users of financial statements would benefit from more consistent accounting for the costs of products manufactured for delivery under long-term production programs. However, it is questionable whether, and if so how, the revenue project affects the accounting for those costs.

**Effects of the revenue project on the accounting for production costs**

14. Because program accounting is a method of accounting for costs, this paper focuses only on the Boards’ recent decisions on fulfillment costs and how those decisions relate to program accounting.<sup>1</sup>
15. As part of the revenue recognition project, the Boards have developed a set of cost guidance with a very limited scope. The purpose in developing that guidance was to ensure that the issuance of a final revenue standard did not create any gaps in existing standards as a result of the final standard replacing some existing revenue standards that contain some limited cost guidance. Hence, the Boards developed cost guidance in the revenue project for the following:
- (a) *setup costs for services contracts* (e.g. labour costs of migrating a customer’s data to an entity’s systems that will be used to provide a service to the customer),

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<sup>1</sup> The Boards also developed guidance on the costs of acquiring or obtaining a contract. However, this paper does not consider the accounting for those costs because they do not relate to the costs of products manufactured under long-term production programs.

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- (b) *precontract costs* (e.g. engineering costs that are incurred in anticipation of a specific construction contract), and
  - (c) *inventory of a services provider* (e.g. an architect that provides design services but does not satisfy a performance obligation until the point in time when the design is transferred to the customer).
- 16. For other costs to fulfil a contract, an entity would apply other guidance such as existing standards on inventory, PP&E, and intangible assets.
- 17. Production costs incurred under a long-term production program are not the types of costs for which the Boards developed cost guidance. Rather, they are the costs incurred by a manufacturer to produce inventory. The amount of inventory derecognized (and recognized as cost of sales) upon delivery of a unit to a customer depends on both of the following:
  - (a) The inventory costing method the entity uses, and
  - (b) Whether the entity recognizes an intangible asset due to a customer relationship or know how that the entity has acquired and that will provide a benefit in the future.
- 18. Some board members have suggested that they would prefer to have greater consistency between US GAAP and IFRS requirements on accounting for inventory and intangible assets. Hence, in February and in April 2011, the Boards considered whether to expand the scope of the cost guidance developed in the revenue project to address inventory and intangible assets. The Boards decided in both instances to not address those topics as part of the revenue project. Rather, the Boards decided to develop cost guidance with a more limited scope (i.e. the scope described in paragraph 15 of this paper).
- 19. Because the Boards have already decided that the scope of the cost guidance developed in the revenue project does not include inventory and intangible assets, the staff thinks that the revenue project does not affect the accounting for costs of products manufactured for delivery under long-term production programs

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(including the program accounting method in US GAAP that is described in Appendix A).

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**Appendix A: “Program accounting” in US GAAP**

- A1. The term “program accounting” often is used in US GAAP to refer to a specific method of accounting for the costs of products manufactured under a long-term production program. In June 1981, the AICPA issued a draft Statement of Position (SOP) on program accounting. Although that draft SOP never was finalized, the document reduced diversity in practice as a result of some companies applying the draft SOP. The description of program accounting in this appendix is based largely on that draft SOP.
- A2. In accordance with the draft SOP, program accounting is deemed acceptable only if **all** of the following conditions are met:
- (a) The design, development, production planning, tooling, production of initial units, and final testing of the product require a substantial commitment of resources and several years to complete.
  - (b) Production units are expected to be routinely produced over an extended period.
  - (c) Pricing of the product is expected to be relatively level over all units or to correlate closely with changes in specific prices associated with direct production costs.
  - (d) Pricing of the product is based on the anticipation of decreasing unit production costs over time.
  - (e) Because of the long lead time, technology involved, and high initial investment associated with a program, it is unlikely that unforeseen competition will significantly reduce the demand for the product during the estimated production period for the program accounting quantity.
  - (f) The enterprise is one of a small number of producers of the type of product being produced, and sells the product in a market with a limited number of identified customers.

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- (g) The enterprise can demonstrate an estimated demand for its product, expressed by customers, in a number of units, or a range of the number of units, that will recover costs to be incurred under the program.
- (h) The enterprise can demonstrate its ability to finance and produce the program product. For example, the enterprise has previously financed and produced similar products.
- (i) The enterprise is able to make reasonably dependable estimates of the number of, or range of numbers of, units to be produced and sold, the length of time to produce and sell them, and their associated production costs and selling prices.
- (j) At the beginning of a program, the enterprise will have obtained firm contracts for units of the product that will not, by themselves, recover the costs of the initial and early production effort.

A3. Under the program method of accounting, the amount recognized as cost of sales is determined by applying the estimated cost of sales percentage for the total program to the amount of revenue recognized. That method differs from inventory accounting in the amount of inventory that is subsequently derecognized, and recognized as cost of sales, upon transfer of a unit to a customer. The following table illustrates that difference (assuming an average costing inventory method):

	<b>Inventory accounting</b>	<b>Program accounting</b>
<b>Cost of sales</b>	The same for each unit delivered	Variable, depending on the selling price of each unit (and the expected profitability of the program)
<b>Profit margin</b>	Variable, depending on the selling price of each unit	The same for each unit delivered

A4. As illustrated above, the program method of accounting results in an entity achieving a consistent profit margin by adjusting the cost of sales of each unit delivered. The difference between actual production costs for a unit and the amount recognized as cost of sales is recognized as an asset typically classified as



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“deferred production costs”. That asset represents know how that the entity has acquired and that will benefit the production of future units.

- A5. As acceptable industry practice, program accounting previously was considered to be Level D GAAP in accordance with the GAAP hierarchy that preceded the FASB’s Codification.
- A6. The Codification did not change GAAP. Hence, an industry practice that was acceptable before the Codification still would be acceptable after the Codification (that is, until a subsequent update to the Codification changed that practice). Consequently, program accounting still is acceptable under current GAAP because the FASB has not issued a standard subsequent to the Codification that changes the practice.
- A7. It was not possible for the Codification to include all industry practice, including the draft SOP on program accounting. Rather, the Codification includes only a few references to the existence of program accounting (i.e. Paragraphs 912-20-25-5A through 912-20-25-8, and 605-35-15-6c).
- A8. In addition, Paragraph 105-10-70-1 states the following regarding “grandfathered guidance” as a result of the Codification eliminating the GAAP hierarchy:

An entity that has followed, and continues to follow, an accounting treatment that was previously in category (c) or category (d) of that GAAP hierarchy as of March 15, 1992, need not change to an accounting treatment in a higher category ((b) or (c)) of that hierarchy if its effective date was before March 15, 1992.

- A9. The staff thinks that program accounting is grandfathered in accordance that provision in the codification. However, the staff observes that there are very few companies that have applied program accounting since before March 15, 1992. The number of companies has diminished over the last thirty years as a consequence of business combinations in the Aerospace and Defense industry in the US.