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Submitted via email (to [director@fasb.org](mailto:director@fasb.org)) and ordinary mail

Technical Director  
Financial Accounting Standards Board  
401 Merritt 7  
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Norwalk, Connecticut 06856-5116

**Reference:** File Reference No. 1820-100

Dear Sir/Madam:

United Technologies Corporation (UTC or the Company) welcomes the opportunity to share its views on the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) (collectively, the "Boards") proposed Accounting Standards Update "*Revenue Recognition (Topic 605)*." (Exposure Draft) UTC is a \$50+ billion global provider of high technology products and services to the building systems and aerospace industries, operating in nearly 190 countries around the world.

Our business units operate in diverse industries, and as a result, we apply a wide range of revenue recognition methodologies based on the practices within those industries. For example, we have:

- Revenue associated with elevator and escalator sales, installations and modernization contracts that are accounted for under the percentage-of completion method;
- Revenues associated with government and commercial fixed-price contracts and government fixed-price-incentive contracts that are recorded at the time deliveries are made or, in some cases, on a percentage-of-completion basis;
- Revenues associated with cost reimbursement contracts that are recorded as work is performed; and
- Revenues associated with service sales, representing aftermarket repair and maintenance activities, that are recognized over the contractual period or as services are performed.

We commend the Boards for their attempt to develop a common revenue standard for U.S. generally accepted accounting principles (GAAP) and International Financial Reporting Standards (IFRS). While we believe that both U.S. GAAP and IFRS would benefit from improvements, there are several issues within the Exposure Draft which we believe will inaccurately reflect revenue recognition and, or cause significant fluctuations in revenue recognition presentation over the life of a contract. For these reasons, and as further explained in our attached responses to the specific questions raised in the discussion paper, we recommend the Boards consider the following:

1. When satisfying a performance obligation through the continuous transfer of goods or services, the Exposure Draft requires that an entity "shall apply to that performance obligation one revenue recognition method that best depicts the transfer of goods or services to the customer."<sup>1</sup> Suitable

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<sup>1</sup> See paragraph 32 of the Exposure Draft

methods of recognizing revenue include output methods, input methods or the passage of time. Example 15 in the Implementation Guidance and Illustrations section appears to indicate that certain factors will require revenue recognition based on input methods, versus output methods. We recommend that the option to utilize input methods or output methods be clarified, as circumstances exist when revenue recognition is best reflected using output methods. This includes contracts containing progress payments and termination of convenience clauses.

2. The Exposure Draft requires an entity to evaluate the terms of each contract to “identify all promised goods or services and determine whether to account for each promised good or service as a separate performance obligation.”<sup>2</sup> Furthermore, the Exposure Draft requires an entity to “recognize a liability and a corresponding expense if a performance obligation is onerous.”<sup>3</sup> There are often valid business reasons for entering into contracts which contain negative margins on certain components, or performance obligations; however, it is less common to enter into contracts with the expectation of an overall loss. By requiring the recognition of liabilities associated with loss generating performance obligations, operating profits will be subject to significant fluctuation and will not provide investors with an accurate understanding of a company’s business. We recommend that the requirement to recognize a liability pertaining to onerous performance obligations only be made when a contract has been identified which will result in an overall loss position.
3. The Exposure Draft requires an entity to “segment a single contract and account for it as two or more contracts if the price of some goods or services in the contract is independent of the price of other goods or services in the contract.”<sup>4</sup> Furthermore, the Exposure Draft provides revenue recognition guidance regarding the Managed Services concept and the transfer of risk to the contractor. In our industry, long-term contracts exist to perform maintenance services on fleets of aircraft at any place or time needed. We expect to account for each of these contracts as one segment, under the Managed Services concept. We recommend that this concept be clarified to include contracts of this nature.
4. The Exposure Draft contains implementation guidance that requires an entity to distinguish between product warranties that provide a customer with coverage for latent defects and those that provide a customer with coverage for faults that arise after the product is transferred to the customer. For warranties pertaining to latent defects, “the warranty requires an evaluation of whether the entity has satisfied its performance obligation to transfer the product specified in the contract.”<sup>5</sup> Example 4 in the Implementation Guidance and Illustrations requires a management estimate of products containing latent defects, with a resulting reduction of revenue and the recording of a performance obligation. Current guidance in FASB Concepts states that “revenues are considered to have been earned when the entity has substantially accomplished what it must do to be entitled to the benefits represented by the revenues,”<sup>6</sup> which generally results in revenue not being recorded unless remaining requirements, such as installation, are deemed perfunctory. We believe that distinguishing between latent defects and faults that arise after the product is transferred will prove to not only require significant resources from the financial statement preparers, but also from a company’s independent auditors. We do not consider the performance

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<sup>2</sup> See paragraph 20 of the Exposure Draft

<sup>3</sup> See paragraph 54 of the Exposure Draft

<sup>4</sup> See paragraph 15 of the Exposure Draft

<sup>5</sup> See paragraph IG14 of the Exposure Draft

<sup>6</sup> See FASB Concepts Statements No. 5: Recognition and Measurement in Financial Statements of Business Enterprises, paragraph 83(b)

of warranty work to be revenue generating; rather we consider it to be a cost of business and therefore, strongly recommend that the current practice of accruing for warranty costs be retained.

5. The Exposure Draft requires disclosures that we believe have little benefit to the financial statement readers, yet will result in unreasonably high cost to the preparers. The Exposure Draft states that “an entity shall disclose information about its performance obligations in contracts with customers.”<sup>7</sup> The Exposure Draft also states that “an entity shall consider the level of detail necessary to satisfy the disclosure requirements... (and)...shall aggregate or disaggregate disclosures so that useful information is not obscured by either the inclusion of a large amount of insignificant detail or the aggregation of items that have different characteristics.”<sup>8</sup> Additionally, for contracts with an original expected duration of more than one year, the Exposure Draft requires the disclosure of “the amount of the transaction price allocated to the performance obligations remaining at the end of the reporting period that are expected to be satisfied”<sup>9</sup> in four separate categories ranging from less than one year to later than three years.

In order to comply with the proposed requirements, it would appear that all contract related data must be accumulated and then sorted to determine material performance obligations. After the material performance obligations are determined, additional details would have to be obtained from around the world to provide readers with disclosures such as payment terms, or when we typically satisfy our performance obligations. We have thousands of open contracts at any given reporting period, which could result in several thousand performance obligations. Disclosure of the above information would result in extensive additional information that would provide no meaningful insight into a company’s current or future performance. Further, such a requirement could very well necessitate system changes, in addition to fundamentally impacting our current closing and reporting processes; changes that would seem to be counter to analysts and investors desires to receive the information more quickly.

We recommend that the Board focus on requiring broad disclosures of the types of open contracts at each period end, and whether there are indicators of any specific contracts that will be in a loss position overall.

6. The Exposure Draft introduces revenue recognition considerations relating to collection issues, including considering the effects of customer credit, the time value of money (TVM), and probability-weighting of variable consideration. We believe that the introduction of these approaches will redirect management’s focus from its core businesses and force it to focus on financing activities. We feel that this is an inappropriate use of resources.

We believe that the revenue an entity records should reflect the value of the good or service that it provides. Adjusting revenue based on customer credit and then subsequently recording collections in addition to the revenue recognized through income, will not provide investors with comparable data regarding revenues for goods sold or services provided. Comparing revenue fluctuations over reporting periods is an indicator of an entity’s growth or contraction. Adjusting core revenues for perceived financing activities will render those comparisons less useful.

We believe that requiring a TVM factor for customer payments that are received either “significantly before or significantly after the transfer of goods or services to the customer”<sup>10</sup>

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<sup>7</sup> See paragraph 77 of the Exposure Draft

<sup>8</sup> See paragraph 70 of the Exposure Draft

<sup>9</sup> See paragraph 79 of the Exposure Draft

<sup>10</sup> See paragraph 45 of the Exposure Draft.

should only be considered when specifically stated in contracts or only for payments contracted to be received significantly after the transfer of goods or services.

We also believe that probability-weighting variable consideration could result in situations where revenue is recorded that will ultimately not be received.

Overall, we believe that the costs associated with assessing and subsequently monitoring the financing aspects of contracts will far outweigh any possible benefit to the users of our financial statements. We strongly recommend that the Boards reconsider the cost benefit of the requirements proposed in the final literature.

We would be happy to further discuss our view on this proposal with the FASB members or its staff.

Sincerely,

/s/ John Stantial  
John Stantial  
Interim Vice President, Controller  
United Technologies Corporation

/s/ Colin Brown  
Colin Brown  
Manager, Technical Accounting  
United Technologies Corporation

## ATTACHMENT

1. ***Paragraphs 12-19 propose a principle (price interdependence) to help an entity determine whether to:***

- a. *combine two or more contracts and account for them as a single contract;*
- b. *segment a single contract and account for it as two or more contracts; and*
- c. *account for a contract modification as a separate contract or as part of the original contract.*

***Do you agree with that principle? If not, what principle would you recommend, and why, for determining whether (a) to combine or segment contracts and (b) to account for a contract modification as a separate contract?***

The principle appears to be consistent with current literature and therefore, we support the concept of using price interdependence in the determination of whether to segment or combine contracts. However, we are concerned that the segmenting concept will be confused with the identification of performance obligations and therefore, could potentially result in diverging applications in practice.

2. ***The Boards propose that an entity should identify the performance obligations to be accounted for separately on the basis of whether the promised good or service is distinct. Paragraph 23 proposes a principle for determining when a good or service is distinct. Do you agree with that principle? If not, what principle would you specify for identifying separate performance obligations and why?***

For relatively simple contracts, with few distinct deliverables, the concept of identifying performance obligations as distinct and then accounting for each separately appears to use the best evidence available for revenue recognition. However, for entities in our industry, this practice has the potential to create an inordinate and unmanageable amount of recordkeeping related to service contracts. Currently, there exist long-term service contracts, under which the customers make payments based on flight hours. In return, the customers' aircraft will be maintained and serviced at any point in time and at any location, at which time revenue will be recognized. Under these contracts, revenue is recognized in accordance with FTB 90-1: *Accounting for Separately Priced Extended Warranty and Product Maintenance Contracts*. We recommend that the Boards consider this guidance in the final draft.

3. ***Do you think that the proposed guidance in paragraphs 25-31 and related implementation guidance are sufficient for determining when control of a promised good or service has been transferred to a customer? If not, why? What additional guidance would you propose and why?***

We believe that the current guidance provides ambiguity in whether revenue should be recognized based on the transfer of control. Based on the implementation guidance in paragraphs IG63 – IG73, there appear to be certain criteria that illustrate continuous transfer of control, with revenue recognition over that period, while additional criteria indicates transfer of control is contingent upon customer acceptance. We feel that circumstances exist in which progress payments are made, or a termination for convenience clause is included in the contract, yet customer acceptance is the best indicator of the satisfaction of the performance obligation. We recommend that the final draft be clarified to include this possibility.

4. ***The Boards propose that if the amount of consideration is variable, an entity should recognize revenue from satisfying a performance obligation only if the transaction price can be***

*reasonably estimated. Paragraph 38 proposes criteria that an entity should meet to be able to reasonably estimate the transaction price.*

*Do you agree that an entity should recognize revenue on the basis of an estimated transaction price? If so, do you agree with the proposed criteria in paragraph 38? If not, what approach do you suggest for recognizing revenue when the transaction price is variable and why?*

For our purposes, the proposed criteria in paragraph 38 provide adequate revenue recognition guidance; however, we believe that the use of the probability-weighted method of estimating variable consideration may result in the recognition of revenue that may ultimately be unrealizable. Management estimates have consistently been used when submitting proposals and when calculating estimates to complete under current literature. We recommend that management estimates be used for estimating the transaction price, rather than the probability weighted method, as these are likely better representations of ultimate revenue levels versus the “artificial” value calculated under a probability-weighted approach.

5. *Paragraph 43 proposes that the transaction price should reflect the customer’s credit risk if its effects on the transaction price can be reasonably estimated. Do you agree that the customer’s credit risk should affect how much revenue an entity recognizes when it satisfies a performance obligation rather than whether the entity recognizes revenue? If not, why?*

We disagree that a transaction price for similar products should differ among customers simply due to their respective credit risks. The revenue an entity recognizes should reflect the value of the good or service transferred. The divergence from current guidance that requires collectability to be reasonably assured prior to recognizing any revenue will likely provide a better matching of revenue with the transfer of control; however, we believe that the effect of a customer’s credit risk should be accounted for through cost of sales. Requiring contractors to record changes of estimates due to customer credit risk, or collections estimated as previously uncollectible, through income or expense will likely create a significant administrative burden of calculating the probability-weighted amounts of consideration to record and then, the subsequent monitoring and support of the changing probability calculation required to record the income and expense effect. The result will likely be incomparable income statements, with companies not receiving adequate credit for their core business of fulfilling their performance obligations, as reported in revenue.

6. *Paragraphs 44 and 45 propose that an entity should adjust the amount of promised consideration to reflect the time value of money if the contract includes a material financing component (whether explicit or implicit). Do you agree? If not, why?*

We do not disagree with the concept of adjusting the amount of promised consideration to reflect the time value of money; however, the practical application of such a proposal across thousands of contracts will require significant additional effort as well as likely system changes. It is highly questionable as to whether that effort and cost will provide information that is meaningful for users of the financial statements. We recommend that the Board modify the proposed guidance to require the bifurcation of contract revenues for a financing component only when explicitly stated within the contract.

7. *Paragraph 50 proposes that an entity should allocate the transaction price to all separate performance obligations in a contract in proportion to the standalone selling price (estimated if necessary) of the good or service underlying each of those performance obligations. Do you agree? If not, when and why would that approach not be appropriate, and how should the transaction price be allocated in such cases?*

In general, we agree that an entity should allocate the transaction price to all separate performance obligations in a contract in proportion to the standalone selling price. However, we are concerned with the related requirement in the Exposure Draft requiring the recording of an accrual for performance obligations that are “onerous”. As noted previously, we recommend that the requirement to recognize a liability pertaining to onerous performance obligations only be made when a contract has been identified which will result in an overall loss position.

8. ***Paragraph 57 proposes that if costs incurred in fulfilling a contract do not give rise to an asset eligible for recognition in accordance with other standards (for example, Topic 330 or IAS 2; Topic 360 or IAS 16; and Topic 985 on software or IAS 38, Intangible Assets), an entity should recognize an asset only if those costs meet specific criteria.***

***Do you think that the proposed guidance on accounting for the costs of fulfilling a contract is operational and sufficient? If not, why?***

See the combined response to questions 8 and 9 below.

9. ***Paragraph 58 proposes the costs that relate directly to a contract for the purposes of (a) recognizing an asset for resources that the entity would use to satisfy performance obligations in a contract and (b) any additional liability recognized for an onerous performance obligation.***

***Do you agree with the costs specified? If not, what costs would you include or exclude and why?***

We do not think that the proposed guidance on accounting for the costs of fulfilling a contract is operational and sufficient; nor do we agree that certain of the costs specified be excluded. In our industry, large, long-term contracts generally exist to build often complex and specialized products. Over the life of these contracts, it is not unusual for the cost per unit to decrease. Current accounting allows various costing methods, including average costing and actual costing. If actual costs are used on an overall profitable contract, the excess of costs over break even for the early production units is deferred and amortized over future delivered units. If management’s estimate of the overall contract will be in a loss position, then the loss is recognized in the period that it is identified. Based on the guidance within the Exposure Draft, the treatment of these fulfillment costs of early units in excess of sales price is the same as “onerous performance obligations”, when in fact; many of these costs are related to natural learning curves or developing efficiencies. Logically, these costs incurred will benefit production over the remaining units. We recommend that the Board consider that charges for these costs not be recorded unless the contract as a whole is estimated to result in an overall loss position.

10. ***The objective of the Boards’ proposed disclosure requirements is to help users of financial statements understand the amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. Do you think the proposed disclosure requirements will meet that objective? If not, why?***

See the combined response to questions 10 and 11 below.

11. ***The Boards propose that an entity should disclose the amount of its remaining performance obligations and the expected timing of their satisfaction for contracts with an original duration expected to exceed on year.***

***Do you agree with that proposed requirement? If not, what, if any, information do you think an entity should disclose about its remaining performance obligations?***

We do not think that the proposed disclosure requirements will help users of financial statements understand the amount, timing and uncertainty of revenue and cash flows arising from contracts with customers, nor do we agree with the proposed disclosure of the amount of an entity's remaining performance obligations and expected timing of their satisfaction. We are concerned that the costs of the disclosure requirements will far outweigh the possible benefits. For a company of our size, with the significant number of contracts outstanding at any reporting period, the disclosure provided in accordance with the Exposure Draft will most certainly confuse readers of the financial statements, rather than enhance their understanding. An example is the requirement to disclose detailed information about a company's performance obligations in contracts with customers. Not only could this require several pages of disclosure, it will also likely require significant system upgrades and integration in order to gather the data from our many locations around the world in a timely manner.

Certain of the disclosure requirements are forward-looking in nature, when we report on historic information. We are concerned that this kind of information is not auditable and therefore, will cause issues for independent auditors as well as lead to the potential presentation of unreliable data across companies.

***12. Do you think that an entity should disaggregate revenue into the categories that best depict how the amount, timing, and uncertainty of revenue and cash flows are affected by economic factors? If not, why?***

We believe that the disaggregation of revenue itself into categories such as the type of good, geography, market or type of customer, and type of contract is reasonable; however, to disaggregate revenues to depict how the amount, timing, and uncertainty of revenue and cash flows are affected by economic factors is much more comprehensive and seems like information that would more likely be found in the MD&A section of filings. As noted above, the collection, compilation and reporting of such information would be excessively time consuming, may require system changes, is not likely to benefit the user, and may potentially be unauditably.

***13. Do you agree that an entity should apply the proposed guidance retrospectively (that is, as if the entity had always applied the proposed guidance to all contracts in existence during any reporting periods presented)? If not, why?***

***Is there an alternative transition method that would preserve trend information about revenue but at a lower cost? If so, please explain the alternative and why you think it is better.***

We do not agree that an entity should be required to apply the proposed guidance retrospectively. Currently, ASC 250: *Accounting Changes and Error Corrections*, provides guidance regarding conditions resulting in the impracticability of applying the effects of an accounting change retrospectively. These conditions provide that retrospective application requires assumptions about management's intent in a prior period that cannot be independently substantiated and is based upon a determination of whether information currently available to develop significant estimates would have been available when the affected transactions or events would have been recognized in the financial statements.

We have thousands of open contracts at any given reporting period. A requirement to recast all such contracts, or to run parallel accounting systems for a period of time, would require



significant investment in systems and finance personnel, as well as contract management. Notwithstanding these concerns, we recognize that comparability is essential to users of the financial statements. Therefore, we recommend that the retrospective application be optional and subject to management's assessment of the potential impact to their financial statement users.

**14. *The proposed implementation guidance is intended to assist an entity in applying the principles in the proposed guidance. Do you think that the implementation guidance is sufficient to make the proposals operational? If not, what additional guidance do you suggest?***

We are concerned that the implementation guidance provided only pertains to relatively simple transactions and therefore, is not operational. As a result, we believe the risk exists that there will be significant divergence in the application of the final pronouncement.

**15. *The Boards propose that an entity should distinguish between the following types of product warranties:***

- a. a warranty that provides a customer with coverage for latent defects in the product. This does not give rise to a performance obligation but requires an evaluation of whether the entity has satisfied its performance obligation to transfer the product specified in the contract.***
- b. a warranty that provides a customer with coverage for faults that arise after the product is transferred to the customer. This gives rise to a performance obligation in addition to the performance obligation to transfer the product specified in the contract.***

***Do you agree with the proposed distinction between the types of product warranties? Do you agree with the proposed accounting for each type of product warranty? If not, how do you think an entity should account for product warranties and why?***

We do not agree with the proposed distinction between the types of product warranties. The proposed guidance pertaining to latent defects appears to conflict with current guidance regarding revenue recognition, under which revenue would be recognized when “the entity has substantially accomplished what it must do to be entitled to the benefits represented by the revenues.”<sup>11</sup> Under the Boards' proposed guidance, there appears to be a risk that an entity could use it as justification to prematurely recognize revenue for transferred products that are not yet operational.

We are also concerned that the requirement to distinguish between two types of product warranties will result in a significant amount of judgment exercised and time incurred determining whether a latent defect existed at the time that the product was transferred. We also believe that this concept will cause issues with independent auditors, as it will be very difficult to prove that a latent defect did not exist at the time of sale. We strongly recommend that revenue not be affected by warranties, but rather, warranties should be accounted for in accordance with current practice, as an accrued cost.

**17. *The Boards propose that in accounting for the gain or loss on the sale of some nonfinancial assets (for example, intangible assets and property, plant and equipment), an entity should apply the recognition and measurement principles of the proposed revenue model. Do you agree? If not, why?***

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<sup>11</sup> See FASB Concepts Statements No. 5: Recognition and Measurement in Financial Statements of Business Enterprises, paragraph 83(b)

We agree that the final guidance should apply to the sale of nonfinancial assets as well; however, it is important that the Boards conclude as to the parameters of the guidance. Currently, there are many accounting pronouncements covering various situations involving the sale of assets.

***18. Should any of the proposed guidance be different for nonpublic entities (private companies and not-for-profit organizations)? If so, which requirement(s) and why?***

No, the final guidance should apply to public and nonpublic entities alike. The FASB's mission is to affect financial reporting that "provides decision-useful information to investors and other users of financial reports."<sup>12</sup> Nonpublic entities seeking financing through debt or private investment should be required to account for revenue recognition in a consistent manner with that of publicly held entities.

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<sup>12</sup> [www.fasb.org](http://www.fasb.org) "The Mission of the Financial Accounting Standards Board"