On October 3, 2016, the Treasury and the IRS released final regulations (T.D. 9786) providing guidance on software development for purposes of claiming the section 41 research credit.

HIGHLIGHTS:

The final regulations retain, in large part, much of the proposed regulations (REG-153656-03, released January 20, 2015), with some added clarifications and examples. This alert focuses on the key provisions of the final regulations, highlighting any changes to the prior proposed regulations.

The final regulations:

- Retain the definition of internal use software (“IUS”) and non-IUS set forth in the proposed regulations;
- Retain the concept of “dual function software” and the associated safe harbor first introduced in the proposed regulations;
- Clarify the innovative and significant economic risk requirements of the high threshold of innovation test applicable to IUS;
- Provide examples of the process of experimentation requirement applicable to all software regardless of internal use or non-internal use; and
- Apply prospectively only, to taxable years beginning on or after October 4, 2016.

DISCUSSION:

I. Definition of Internal Use Software (“IUS”) and non-IUS Software

A. IUS defined as general and administrative software:

The final regulations include the definition of IUS introduced in the proposed regulations, as “software is developed by (or for the benefit of) the taxpayer primarily [emphasis added] for internal use if the software is developed for use in general and administrative functions that facilitate or support the conduct of the taxpayer’s trade or business.”

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1 Treas. Reg. § 1.41-4(c)(6)(iii)(A).
Such general and administrative functions are organized into the following three areas (and specific functions under each area are further articulated in subsections (B)(1)-(3) of the final regulations): financial management, human resources management, and support services.

The final regulations provide specific examples of “general and administrative functions” in each of the three areas. Financial management functions are functions that involve the financial management of the taxpayer and the supporting recordkeeping (ex. accounts payable, bookkeeping, budgeting, inventory management, financial reporting, strategic business planning, etc.). Human resources management functions are functions that manage the taxpayer’s workforce (ex. recruiting, hiring, training, payroll, benefits, etc.). Support services are other functions that support the day-to-day operations of the taxpayer (ex. data processing, facility services, graphic services, marketing, security services, facility services, etc.).

The list of general and administrative functions provided in the final (and proposed regulations) was intended to target back-office functions that most taxpayers have regardless of industry.

**OBSERVATIONS:**

- Determination of whether software is developed primarily for internal use depends upon the intent of the taxpayer and the facts and circumstances at the beginning of software development. The characterization of a function as back office will vary depending on the facts and circumstances of the taxpayer. For example, tax software developed by a company engaged in providing tax services to its customers may not be characterized as providing a general and administrative function for that specific taxpayer.

**B. Non-IUS Definition – Six Categories:**

Adopting the proposed regulations, the final regulations provide that if a taxpayer intends to develop software that falls within one of the following six categories, such software will not be treated as IUS, and therefore, will not be subject to the high threshold of innovation test:

1. Software developed for use in an activity that constitutes qualified research.

2. Software used within the production process to which the requirements of section 41(d)(1) are met.

3. Software developed together with (or embedded in) hardware, offered as a single product.2

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2 Items 1 through 3 above have traditionally been included as exceptions to the definition of internal use software, and their non-IUS designation remains the same. Items 4 through 6 were first introduced in the 2015 proposed IUS regulations, and carryover unmodified in the final regulations.
4. Software developed to be commercially sold, leased, licensed, or otherwise marketed to third parties. As explained in the background to the final regulations, while the definition was not formally changed to include the term ‘hosted’, this is now understood to include hosted software, as well as other software where there is no transfer of a copy of the software. Example 9 was added to the final regulations to demonstrate this.

5. Software developed to enable a taxpayer to interact with third parties or to allow third parties to initiate functions or review data on the taxpayer’s system.3 “Third parties” are defined as members outside the taxpayer’s controlled group, and does not include any persons (i.e. supplier/vendor) that use the software to support general and administrative functions of the taxpayer.4

6. Any software that is developed to not be used in a general and administrative function. This is the case even if the software is not developed to be commercially sold, leased, licensed, or otherwise marketed to third parties, or is not developed to enable a taxpayer to interact with third parties or to allow third parties to initiate functions or review data on the taxpayer’s system.

OBSERVATIONS:

- The final regulations narrow the IUS definition to include only software that is developed for use in general and administrative functions that facilitate or support the conduct of the taxpayer’s trade or business. Thus, the preamble provides “… [a]ny software that is not developed to be used in a general or administrative function will not be considered to be developed for internal use.”

- The determination of whether software is developed primarily for internal use or not depends on the intent of the taxpayer and the facts and circumstances at the beginning5 of the software development. Additionally, whether certain software is developed to be used primarily for internal use should be based on the function the software provides, rather than the type of software.

III. Dual Function Software and Safe Harbor

A. Definition:

As originally included in the proposed regulations and included, unmodified in the final regulations, dual function software is defined as software used in general and administrative functions that facilitate or

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5 Treas. Reg. § 1.41-4(c)(6)(v).
support the conduct of the taxpayer’s trade or business and also enable a taxpayer to interact with third parties (or to allow third parties to initiate functions or review data on the taxpayer’s system).6

Dual function software is presumed to be IUS, except to the extent, a taxpayer can identify a subset of elements of dual function software that only supports third party interaction. Such subset will not be considered IUS.

B.  **Safe Harbor:**

In the event a taxpayer either cannot determine how much of its development activities relate to internal versus external development, or after determining the portion related to external development there is still a subset of dual function software development remaining, the taxpayer may (at its option) apply a safe harbor to such activities. The safe harbor allows for 25 percent of the qualified research expenditures of the dual function software in calculating the credit if the use of the dual function software by third parties is reasonably anticipated to constitute at least 10 percent of its use.7 The final regulations provide that any objective, reasonable method within the taxpayer’s industry may be used to determine whether the 10 percent requirement is met.

If the taxpayer chooses not to apply the safe harbor, the dual function software is presumed to be IUS and therefore is subject to the high threshold of innovation.

C.  **Time of Determination:**

For purposes of applying the safe harbor, the taxpayer must determine or estimate the percentage of third party use at the beginning of the software development.

**OBSERVATIONS:**

- While the proposed regulations introduced the term “dual function software,” the final regulations provided more clarity about the application of the safe harbor. While somewhat similar, this safe harbor should not be construed to have the same meaning as the ‘substantially all’ and ‘shrink back’ rules found in § 1.41-4(b)(2).

**IV. High Threshold of Innovation Test**

A.  **3 Additional Qualification Requirements for IUS: The High Threshold of Innovation Test**

In addition to the Four-Part test applicable for all projects regardless of industry, IUS must satisfy three additional elements known as the high threshold of innovation test:

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6 Treas. Reg. § 1.41-4(c)(6)(vi).
7 Treas. Reg. § 1.41-4(c)(6)(vi)(C).
1. The software must be innovative\(^8\) - must result in a reduction in cost or improvement in speed or other measurable improvement, that is substantial and economically significant;

2. The software development involves significant economic risk\(^9\) – the taxpayer must commit substantial resources to the development and there must be substantial uncertainty, because of technical risk, that such resources would be recovered within a reasonable period; and

3. The software is not commercially available for use by the taxpayer\(^10\) - software cannot be purchased, leased, or licensed for its intended purpose without modification (to the degree significant enough to be considered for otherwise qualifying research activity).


The final regulations clarify that the existence of capability, methodology, and/or design uncertainty may be considered in determining whether substantial uncertainty exists. This is a change to the proposed regulations, which provided that the uncertainty faced by the taxpayer could only relate to capability or methodology. The IRS acknowledges that the proper inquiry is the level of uncertainty that exists and not the type. Finally, the final regulations confirm that the term “substantial uncertainty” requires a higher level of uncertainty and technical risk than that required under I.R.C. § 41 (i.e., the technical uncertainty prong of the Four-Part test).

OBSERVATIONS:

- The Treasury and the IRS have relaxed the standard provided in the proposed regulations. Those regulations provided that “substantial certainty” was limited to capability or methodology uncertainty, and did not include design uncertainty (both section 174 and 41 have long included the concept of design uncertainty).

- Despite the change in language, the preamble to the final regulations provides, “… [T]reasury and the IRS believe that internal use software research activities that involve only uncertainty related to appropriate design and not capability or methodology, would rarely qualify as having substantial uncertainty for purposes of the high threshold of innovation test.”

- An IRS coordinated issue paper sets forth the factors to be considered and provides guidance in determining if a taxpayer meets the significant economic risk test.\(^11\)

\(^{8}\) Treas. Reg. § 1.41-4(c)(6)(vii)(B).

\(^{9}\) Treas. Reg. § 1.41-4(c)(6)(vii)(C).

\(^{10}\) Treas. Reg. § 1.41-4(c)(6)(vii)(A)(3).

\(^{11}\) Coordinated Issue All Industries Research Tax Credit – Internal Use Software (Aug. 26, 1999).
The preamble to the final regulations confirms that revolutionary discovery is not required to meet the high threshold of innovation test. The final regulations, therefore, eliminated a sentence first included in the proposed regulations that implied a revolutionary discovery would be required.

V. Process of Experimentation Examples for Software

Regardless of whether software development is considered to be primarily for internal use or not, all software development activities must meet the process of experimentation criterion (in addition to the three other criteria, which have remain unchanged in the proposed and final regulations) in order for such activities to be considered “qualifying” activities for research tax credit purposes. The ever-evolving world of software development has changed greatly since the time of enactment of the original research tax credit criteria, making it difficult to apply antiquated requirements to the actual software development activities occurring today. For that reason, six new examples were added to the proposed regulations (and remained unchanged in the final regulations) to help clarify the application of the unchanged, process of experimentation requirement to more modern-day software activities.12

VI. Duty of Consistency

The final regulations confirm the long-standing rule that qualified research expenses and gross receipts taken into account in computing a taxpayer’s fixed-base percentage and base amount must be determined on a basis consistent with the current year, without regard to the law in effect for the taxable years used to compute the base amount.

VII. Effective Date

These final regulations are prospective only and apply to taxable years beginning on or after October 4, 2016. However, for tax years beginning on or after January 20, 2015, and beginning before October 4, 2016, the IRS will not challenge return positions consistent with the final regulations or the 2015 proposed regulations.

For taxable years ending before January 20, 2015, taxpayers may choose to follow either all of the final regulations published on January 3, 2001 (T.D. 8930) or the proposed regulations published on December 26, 2001 (REG-112991-01).

OBSERVATIONS:

- For tax years ending prior to January 20, 2015, it is unclear what the impact is of the language that allows taxpayers the choice to follow “all” of the provisions of T.D. 8930 or REG-112991-01.

12 An explanation of each example is beyond the scope of this alert. However, TCC has prepared an analysis of the process of experimentation requirement specifically as it relates to software. That analysis includes an in-depth explanation of the examples in the final regulations, and is available upon request.
To the extent that the regulation may require taxpayers to select and then adopt all of the provisions of a given set of regulations this would appear to conflict with *FedEx Corporation v. United States of America*\(^{13}\) and the IRS’s reasoning in CCA 201423023.\(^{14}\)

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\(^{14}\) T.D. 8930 contained the eliminated “discovery test,” while REG-112991-01 contained a much higher standard (also withdrawn) for the innovation test. The requirement set forth by the IRS in Announcement 2004-9, requiring taxpayers to select and apply all of the provisions of either T.D. 8930 or REG-112991-01 put taxpayers in the untenable position of either having to apply the repudiated discovery test of T.D. 8930, or the much stricter standard for innovation contained in REG-112991-01. In *FedEx*, the court questioned the authority to require taxpayers to comply with Announcement 2004-9 when that guidance partly conflicted with the provisions of REG-112991-01. As a result, the court allowed the taxpayer to apply the Four-Part test under REG-112991-01 (i.e., no discovery test), while applying the more relaxed standard for innovation for the high threshold of innovation test contained in T.D. 8930. The CCA seemingly adopted the reasoning of the *FedEx* case.