

# Final Regulations Further Expand the R&D Tax Credit for Software Development

Taxpayers were pleasantly surprised in early 2015 when the Treasury/IRS issued proposed regulations relating to the treatment of software development under the Section 41 Research Credit. Financial institutions were particularly interested in the changes made to the definition of Internal Use Software (IUS) development and the related qualification requirements. Since most of their software development had been classified as IUS in the past, and the challenge of proving credit eligibility for IUS development was so difficult, financial institutions have long suffered an uphill battle to secure this incentive. Although the proposed rules appeared very favorable, and would likely allow credit eligibility to most customer-facing type application development that financial institutions are currently developing, some of the proposed provisions likely would cause significant confusion not only for taxpayers but for the IRS as well—and thus certainly result in future tax controversy. As this article details, the final regulations issued in October 2016 have revised the proposed rules, making significant favorable changes and providing much greater clarity.

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On October 4, 2016, the Treasury Department and the IRS published final regulations relating to Internal Use Software (IUS) development under Internal Revenue Code Section 41 relating to the research credit.<sup>1</sup> While the final regulations adopted many of the provisions of the earlier proposed regulations, significant changes were made and several additional examples of the application of these rules were added.<sup>2</sup> Armed with these regulations and a permanent credit, taxpayers conducting software

development are now in a much better position to plan for and document research credit claims.<sup>3</sup> These final regulations continue a recent line of “pro-taxpayer” legislation, regulation, and court rulings relating to the research credit, which will allow for the expanded utilization of this incentive and reduce the controversy that has historically plagued taxpayers who have claimed it.

Financial institutions will especially see greater opportunity to claim R&D credits for their investment in customer-facing software applications. Pursuant to these regulations, investment in the design, development, and implementation of client systems such as online banking, online investment services, web-based insurance quoting services, and mobile apps, may now face fewer qualification requirements for credit eligibility. In addition, the new regulations provide for a more favorable definition of the three requirements that make up the high threshold of innovation

<sup>1</sup> T.D. 9786, 81 Fed. Reg. 68299, 68312 (Oct. 4, 2016). Unless otherwise noted, all Section references are to the Internal Revenue Code of 1986, as amended (the “Code” or the “IRC”), and the Treasury Regulations issued thereunder.

<sup>2</sup> On January 20, 2015, the Treasury Department and the IRS published in the Federal Register (80 FR 2624, Jan. 20, 2015) a notice of proposed rulemaking (REG-153656-03, 2015-5 IRB 566). Comments responding to the proposed regulations were received and a public hearing was held on April 17, 2015.

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<sup>3</sup> The recently enacted Protecting Americans from Tax Hikes (PATH) Act of 2015 (P.L. 114-113, Dec. 18, 2015), provides for a permanent IRC § 41 Research and Development Credit, and two new provisions which allow the credit to offset Alternative Minimum Tax (AMT) liability and payroll taxes for qualifying small businesses.

test for IUS and the process of experimentation test to which all software development is subject. Given this clarity and, now, the ability to plan the preparation of requisite supporting documentation, taxpayers should have a better chance in the future of sustaining credits claimed for software development, whether it is for internal use or not.

## RESEARCH CREDIT BASICS

Enacted in 1986, the modern day research credit is found under Section 41. This section sets out four requirements that must be met for any development activity to qualify for the research credit,<sup>4</sup> generally

enacted in 1986.”<sup>7</sup> All aspects of business activity now use computer software, and it has increased the productivity of the economy in the U.S. and made it more globally competitive.<sup>8</sup>

**The Basic Four-Part Test.** Software development that is *not* related to internal use must meet the only basic four-part test to be credit eligible; IUS development is not credit eligible unless it meets further regulatory requirements. Simply put, software developed for internal use is subject to more stringent credit eligibility requirements.

The four-part test provides that each of the following requirements (further defined by applicable regulations) be met:

1. **Permitted Purpose:** The development activity must be undertaken for the purpose of developing a new or improved “business component.” A business component is any product, process, computer software, technique, formula, or invention that is to be either (1) held for sale, lease, or license by the company, or (2) used in the company’s trade or business. The development must relate to a new or improved function of the business component, or to its performance, reliability, or quality. Development relating solely to style, taste, cosmetic, or seasonal design factors will not satisfy this requirement.
2. **Development Uncertainty:** The development activities must be intended to discover information that would eliminate uncertainty concerning the development or improvement of a business component. Uncertainty exists if at the outset, the taxpayer is uncertain about (1) whether it can develop the business component it wants to develop (Capability), (2) how to develop the business component it wants to develop (Method), or (3) the appropriate design of the business component it wants to develop (Design).
3. **Technological Information:** The process of experimentation utilized in the research must fundamentally rely on the principles of the physical or biological sciences, engineering, or computer science. That is, the research cannot be in the “soft” sciences, such as, economics, psychology, management sciences, etc.

## Software developed for internal use is subject to more stringent credit eligibility requirements.

referred to as the “four-part test.” For any R&D activity to qualify (i.e., IUS development or otherwise), it must satisfy each element of the four-part test. However, Section 41 also provides for specific exclusions to the general rule of qualification.<sup>5</sup> One of these specific exclusions relates to IUS. The applicable statute section states:

Computer software—*Except to the extent provided in regulations*, any research with respect to *computer software* which is developed by (or for the benefit of) the taxpayer primarily for *internal use* by the taxpayer, other than for use in—

- (i) an activity which constitutes qualified research (determined with regard to this subparagraph), or
- (ii) a production process with respect to which the requirements of paragraph (1) are met.<sup>6</sup>

Note that when this credit was enacted in the early 1980s the U.S. economy was manufacturing-based, and the software technology industry played little role in it. In addition, the use of computer software in manufacturing was limited, and its value to the manufacturing industry was not fully understood. As noted in the Preamble of the proposed regulations, it is difficult to reconcile a current and useful definition of IUS with congressional intent formulated almost 30 years ago: “The role that computer software plays in business activities is very different today than it was when the exclusion for internal use software was

<sup>4</sup> IRC § 41(d).

<sup>5</sup> IRC § 41(d)(4).

<sup>6</sup> IRC § 41(d)(4)(E) (emphasis added).

<sup>7</sup> Prop. Treas. Reg. § 1.41-4(c)(6) Preamble, 80 Fed. Reg. at 2626 (2015).

<sup>8</sup> Id.

4. *Process of Experimentation*: To engage in a process of experimentation the development or design activities must involve a process of evaluating one or more alternatives designed to achieve a desired result, where the capability or the method of achieving that result, or the appropriate design of that result, is uncertain at the outset. This may involve developing one or more hypotheses, testing and analyzing the hypotheses, and refining or discarding the hypotheses as part of a design process. Acceptable methods of experimentation include: modeling, simulation, or systematic trial and error.<sup>9</sup>

Development of a new or improved software application can generally meet these four tests where the design of the underlying code is unknown at the outset of the development project. Given that applicable regulations specifically provide that utilizing the fundamentals of computer science will satisfy the technological information test and that trial and error experimentation (the standard for software developers) is an acceptable method of experimentation, unless the developer is duplicating known code the tests should be met. Therefore, it is in the taxpayer's best interest for its software under development to be categorized as non-internal use, and thus only subject to these four tests.

**Additional IUS Requirements.** As noted earlier, IUS development faces additional hurdles before qualifying for the research credit. IUS development is subject to three additional requirements, collectively referred to as the High Threshold of Innovation Test ("HTI Test"):

1. The software is innovative;
2. The software development involves significant economic risk; and,
3. The software is not commercially available.

*Innovative.* The final regulations have kept the innovation requirement that was in the proposed regulations:

Software is innovative if the software would result in a reduction in cost or improvement in speed or other measurable improvement, that is substantial and economically significant, if the development is or would have been successful. This is a measurable objective standard, not a determination of the unique

or novel nature of the software or the software development process.<sup>10</sup>

As noted in the proposed regulations, the intent of this test is not to require a subjective measurement against previous development, but rather to provide an objective test that is measurable. Critically, there is no requirement that the development be successful in the end for it to pass this test. Although this is a favorable provision, it does put the onus on the taxpayer to document the intended benefits of the development at the outset of the project, in case there is a subsequent failure that would make measuring improvement impossible.

**Although the definition of "innovative" is a favorable provision, it does put the onus on the taxpayer to document the intended benefits of the development at the outset of the project, in case there is a subsequent failure that would make measuring improvement impossible.**

*Significant Economic Risk.* This requirement of the HTI Test was significantly and favorably revised in the final regulations. Historically this test has been defined as follows:

The software development involves significant economic risk (as where the taxpayer commits substantial resources to the development and there is a substantial uncertainty, because of technical risk, that such resources would be recovered within a reasonable period).<sup>11</sup>

The proposed regulations did not allow design uncertainty to meet the required substantial uncertainty component of this test, stating:

Substantial uncertainty exists if, at the beginning of the taxpayer's activities, the information available to the taxpayer does not establish the capability or method for developing or improving the software.<sup>12</sup>

The drafters of the regulations reasoned that the elimination of design uncertainty, which is included as an eligible uncertainty for the four-part test, would create the requisite "substantial" level that this test

<sup>9</sup> Treas. Reg. § 1.41-4 Qualified research for expenditures paid or incurred in taxable years ending on or after December 31, 2003. 69 FR 22; Treas. Dec. Int. Rev. 9104 (Jan. 2, 2004).

<sup>10</sup> Treas. Reg. § 1.41-4(c)(6)(vii)(B).

<sup>11</sup> Treas. Reg. § 1.41-4(c)(6)(vi)(B); T.D. 8930 (Jan. 3, 2001).

<sup>12</sup> Prop. Treas. Reg. § 1.41-4(c)(6)(v)(C), 80 Fed. Reg. at 2633 (2015).

requires. However, in the final regulations the Treasury/IRS reversed itself. Noting that it is difficult to delineate the types of technical uncertainties and that attempting to do so may lead to unnecessary burdens on both taxpayers and the IRS, the final regulations include applicable design uncertainty as a type of substantial uncertainty. In addition, Treasury/IRS explained that “the appropriate design uncertainty of internal use software may be inextricably linked to substantial uncertainty regarding capability or method.

test will be based on the taxpayer’s particular facts and circumstances, Treasury/IRS chose not to provide further guidance or examples, as they would have to be too specific and thus not helpful. Therefore, it will be important for taxpayers to identify those facts at the beginning of a software development project and document their conclusions.

**Not Commercially Available.** Also unchanged from the proposed version, under the final regulations

software is not commercially available for use by the taxpayer in that the software cannot be purchased, leased, or licensed and used for the intended purpose without modifications that would satisfy the requirements of paragraphs (c)(6)(vii)(A)(1) and (2) of this section.<sup>16</sup>

Although unchanged in both the proposed and final regulations from earlier versions of regulation, it is important to note that purchased software that is modified to meet a specific user’s functionality or requirements may pass this test. What is required is that the modification development pass both the innovative and significant-economic-risk tests.

## WHAT IS—AND ISN’T—“INTERNAL USE SOFTWARE”

**What IUS Is.** The proposed regulations define software developed for internal use to be computer software developed by (or for the benefit of) the taxpayer primarily for the taxpayer’s use in general and administrative functions that facilitate or support the conduct of the taxpayer’s trade or business. General and administrative functions, as defined in the proposed regulations, are limited to:

1. Financial management functions;
2. Human resource management functions; and
3. Support services functions.<sup>17</sup>

The final regulations did not alter this list of functions or the more detailed list of services that the proposed regulations listed as examples of each.

However, the final regulations again noted (as was also the case in the proposed regulations) that the list of general and administrative functions is intended to target the back-office functions that most taxpayers would have regardless of the taxpayer’s industry, and that the characterization of a function as back-office

**Purchased software that is modified to meet a specific user’s functionality or requirements may pass the not-commercially-available test. What is required is that the modification development pass both the innovative and significant-economic-risk tests.**

The focus of the significant economic risk test should be on the level of uncertainty that exists and not the types of uncertainty.”<sup>13</sup> However, they also cautioned “. . . 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.”<sup>14</sup>

The final regulations read as follows:

The software development involves significant economic risk if the taxpayer commits substantial resources to the development and if there is substantial uncertainty, because of technical risk, that such resources would be recovered within a reasonable period. The term “substantial uncertainty” requires a higher level of uncertainty and technical risk than that required for business components that are not internal use software. This standard does not require technical uncertainty regarding whether the final result can ever be achieved, but rather whether the final result can be achieved within a timeframe that will allow the substantial resources committed to the development to be recovered within a reasonable period. Technical risk arises from uncertainty that is technological in nature, as defined in paragraph (a) (4) of this section, and substantial uncertainty must exist at the beginning of the taxpayer’s activities.<sup>15</sup>

Other than explaining that the “substantial resources” and “reasonable period” components of this

<sup>13</sup> Treas. Reg. § 1.41-4(c)(6) Preamble, 81 Fed. Reg. at 68304 (2016).

<sup>14</sup> Id.

<sup>15</sup> Treas. Reg. § 1.41-4(c)(6)(vii)(C).

<sup>16</sup> Treas. Reg. § 1.41-4(c)(6)(vii)(A)(3).

<sup>17</sup> Prop. Treas. Reg. § 1.41-4(c)(6)(iii), 80 Fed. Reg. at 2631 (2015).

will vary depending on the taxpayer's facts and circumstances. In addition, the final regulations clarified that the determination of whether software is developed primarily for internal use depends on the taxpayer's intent and the facts and circumstances at the beginning of software development.<sup>18</sup>

**What IUS Isn't.** Although not substantively changing the definition, final regulations clarified that software is *not* developed primarily for the taxpayer's internal use if it is not developed for use in general and administrative functions that facilitate or support the conduct of the taxpayer's trade or business. Examples of types of software that are not regarded as IUS include:

- Software that is developed to be commercially sold, leased, licensed, or otherwise marketed to third parties; and
- Software that is 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.

In addition, a new example was added to clarify that "hosted" software will not be considered IUS:

*Facts.* X is a provider of cloud-based software. X develops enterprise application software (including customer relationship management, sales automation, and accounting software) to be accessed online and used by X's customers. At the beginning of development, X intended to develop the software for commercial sale, lease, license, or to be otherwise marketed to third parties.

*Conclusion.* The software is not developed primarily for internal use because it is not developed for use in a general and administrative function. X developed the software to be commercially sold, leased, licensed, or otherwise marketed to third parties under paragraph (c)(6)(iv)(A) of this section.<sup>19</sup>

This new example is helpful as it clarifies that the actual transfer of a copy of the software to a third party is not a necessary prerequisite for the software to be classified as "software that is developed to be commercially sold, leased, licensed or otherwise marketed to third parties."

**What About Dual-Function Software?** The final regulations maintain the presumption of internal

use when both IUS and non-IUS software are being developed as part of an integrated system. Such a system is referred to as "dual function" software in the regulations. Taxpayers that develop dual-function software will bear the burden of proof to overcome the presumption of internal use for the non-IUS portion of such software's integrated functions. However, to the extent that the taxpayer can identify a non-IUS subset of the dual-function computer software, then for that subset of the software development the presumption of internal use does not apply.

Even after identifying non-IUS subsets of a software system, there may still exist dual-function software. The proposed regulations had provided

**The safe harbor rules for dual-function software allow inclusion of 25 percent of the qualified research expenditures of the remaining dual-function subset in computing the amount of the taxpayer's credit.**

a safe harbor approach to dealing with this dual-function software, and the final regulations retained these safe harbor rules in a favorably revised version that is more industry specific.

The safe harbor rules for dual-function software allow inclusion of 25 percent of the qualified research expenditures of the remaining dual function subset in computing the amount of the taxpayer's credit. However, the taxpayer must be able to substantiate that (1) the use of the dual-function subset by third parties, or by the taxpayer to interact with third parties, is reasonably anticipated to constitute at least 10 percent of the dual-function subset's use and (2) the taxpayer's research activities related to the dual-function subset constitute qualified research. The final regulations contain a taxpayer favorable change in this section, providing that any objective, reasonable method within the taxpayer's industry may be used for purposes of the safe harbor.<sup>20</sup>

#### EFFECTIVE DATE

The IRS provides taxpayers with two options for applying the new regulations:

- Taxpayers may utilize them solely on a prospective basis, starting with the tax year beginning on or after October 4, 2016; *or*

<sup>18</sup> Treas. Reg. § 1.41-4(c)(6)(v).

<sup>19</sup> Treas. Reg. § 1.41-4(c)(6)(viii), Example 9—*Not internal use software; commercially sold, leased, licensed, or otherwise marketed.*

<sup>20</sup> Treas. Reg. § 1.41-4(c)(6)(vi)(C).

- For any taxable year that both ends on or after January 20, 2015, and begins before October 4, 2016, the IRS will not challenge return positions consistent with all the provisions of the final regulations.<sup>21</sup>

## CONCLUSION

With the issuance of final regulations, there now exists a significant opportunity for financial institutions conducting certain customer-facing software development to claim the research credit. These activities no longer will be subject to the heightened requirements mandated for internal use software, and thus they are more likely to qualify for the credit. In addition, the new regulations provide taxpayers with clarity as to (1) the definition of the three requirements that make up the high-threshold-of-innovation test for IUS and (2) the process-of-experimentation test that all software development is subject to. Given this clarity and, now, the ability to plan the preparation of requisite

<sup>21</sup> Treas. Reg. § 1.41-4(c)(6) Preamble, 81 Fed. Reg. at 68306 (2016).

supporting documentation, taxpayers should have a better chance in the future of sustaining credits claimed for software development, whether it is for internal use or not.

However, challenges remain and controversy will certainly not disappear entirely. Specifically, in the area of dual-function software taxpayers will have the burden to document subjective- and objective-based requirements, which but for credit eligibility would not otherwise be documented. This burden will also apply to software development that is categorized as internal use under the final regulations, and in particular in substantiating that the significant-economic-risk test is met. The good news is that Treasury/IRS has been clear that these requirements should not be interpreted so restrictively as to make them impossible to meet in practice.<sup>22</sup> ■

<sup>22</sup> Prop. Treas. Reg. § 1.41-4(c)(6) Preamble, 80 Fed. Reg. at 2627 (2015). At the same time, it is clear that Congress intended that some software developed primarily for internal use would meet the high-threshold-of-innovation test. Accordingly, the requirements should not be so restrictive as to make the test impossible to meet. The proposed regulations provide rules of application with respect to the high-threshold-of-innovation test that reflect this purpose.



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