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DEPARTMENT OF THE TREASURY

Internal Revenue Service

26 CFR Part 1

[REG-130700-14]

RIN 1545-BM41

Classification of Cloud Transactions and Transactions Involving Digital Content

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Notice of proposed rulemaking.

SUMMARY: This document contains proposed regulations regarding the classification of cloud transactions for purposes of the international provisions of the Internal Revenue Code. These proposed regulations also modify the rules for classifying transactions involving computer programs, including by applying the rules to transfers of digital content.

DATES: Comments and requests for a public hearing must be received by **INSERT DATE 90 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER**.

ADDRESSES: Send submissions to: CC:PA:LPD:PR (REG-130700-14), room 5203, Internal Revenue Service, P.O. Box 7604, Ben Franklin Station, Washington, DC 20044. Submissions may be hand-delivered Monday through Friday between the hours of 8 a.m. and 4 p.m. to: CC:PA:LPD:PR (REG-130700-14), Courier's Desk, Internal Revenue Service, 1111 Constitution Avenue NW., Washington, DC. Alternatively,

taxpayers may submit comments electronically via the Federal eRulemaking Portal at www.regulations.gov (REG-130700-14).

FOR FURTHER INFORMATION CONTACT: Concerning the proposed regulations Robert Z. Kelley, (202) 317-6939; concerning submissions of comments and requests for a public hearing, Regina L. Johnson, (202) 317-6901 (not toll free numbers).

SUPPLEMENTARY INFORMATION:

Background

These regulations (the proposed regulations) clarify the treatment under certain provisions of the Internal Revenue Code (Code) of income from transactions involving on-demand network access to computing and other similar resources. The proposed regulations also extend the classification rules in existing §1.861-18 to transfers of digital content other than computer programs and clarify the source of income for certain transactions governed by existing §1.861-18.

Existing §1.861-18 provides rules for classifying transactions involving computer programs. For this purpose, §1.861-18(a)(3) defines a computer program as “a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result” and includes “any media, user manuals, documentation, data base or similar item if the media, user manuals, documentation, data base or similar item is incidental to the operation of the computer program.” Under §1.861-18(b)(1), a transaction to which the section applies is categorized as (i) a transfer of a copyright right in a computer program; (ii) a transfer of a copy of a computer program (a “copyrighted article”); (iii) the provision of services for the development or modification of a computer program; or (iv) the provision of know-how relating to computer

programming techniques. Section 1.861-18(c) provides that a transfer of a computer program is classified as the transfer of a copyright right if there is a non-de minimis grant of any of the following four rights: (i) The right to make copies of the computer program for purposes of distribution to the public by sale or other transfer of ownership, or by rental, lease, or lending; (ii) the right to prepare derivative computer programs based upon the copyrighted computer program; (iii) the right to make a public performance of the computer program; or (iv) the right to publicly display the computer program. Section 1.861-18(f) further categorizes a transfer of a copyright right as either the sale or license of the copyright right and a transfer of a copyrighted article as either the sale or lease of the copyrighted article.

Section 1.861-18 generally does not provide a comprehensive basis for categorizing many common transactions involving what is commonly referred to as “cloud computing,” which typically is characterized by on-demand network access to computing resources, such as networks, servers, storage, and software. See, e.g., National Institute of Standards and Technology, Special Publication 500-322 (February 2018) (“NIST Report”). Cloud computing transactions typically are described for non-tax purposes as following one or more of the following three models: Software as a Service (“SaaS”); Platform as a Service (“PaaS”); and Infrastructure as a Service (“IaaS”). SaaS allows customers to access applications on a provider’s cloud infrastructure through an interface such as a web browser. NIST Report, p. 9-10. PaaS allows customers to deploy applications created by the customer onto a provider’s cloud infrastructure using programming languages, libraries, services, and tools supported by the provider. NIST Report, pp. 10-11. IaaS allows customers to access processing,

storage, networks, and other infrastructure resources on a provider's cloud infrastructure. NIST Report, p. 11. A cloud computing transaction typically does not involve any transfer of a computer program classified under §1.861-18 as a transfer of a copyright right or copyrighted article or any provision of development services or know-how relating to computer programs or programming. Although certain cloud computing transactions may provide similar functionality with respect to computer programs as transactions subject to §1.861-18 (for example, the transfer of a computer program via download may provide similar functionality as the same program accessed via a web browser), §1.861-18 does not address the provision of online access to use the computer program. Accordingly, §1.861-18 would not apply to classify such a transaction.

In addition to the cloud computing models described above, other transactions exist that are not solely related to computing but still involve on-demand network access to technological resources (these transactions and cloud computing transactions are collectively referred to herein as "cloud transactions"). These transactions have increased in frequency over time and share similarities with the three cloud computing models described above. Examples include streaming music and video, transactions involving mobile device applications ("apps"), and access to data through remotely hosted software. These transactions may not involve, in whole or in part, a transfer under §1.861-18 of a copyright right or copyrighted article, or a provision of development services or know-how relating to computer programs or programming.

In general, a cloud transaction involves access to property or use of property, instead of the sale, exchange, or license of property, and therefore typically would be

classified as either a lease of property or a provision of services. Section 7701(e) and case law provide factors that are relevant for classifying a transaction as either a lease of property or a provision of services. In particular, section 7701(e)(1) provides that a contract that purports to be a service contract will be treated instead as a lease of property if the contract is properly treated as a lease taking into account all relevant factors, including whether (1) the service recipient is in physical possession of the property, (2) the service recipient controls the property, (3) the service recipient has a significant economic or possessory interest in the property, (4) the service provider does not bear any risk of substantially diminished receipts or substantially increased expenditures if there is nonperformance under the contract, (5) the service provider does not use the property concurrently to provide significant services to entities unrelated to the service recipient, and (6) the total contract price does not substantially exceed the rental value of the property for the contract period. Section 7701(e)(2) provides that the factors in section 7701(e)(1) apply to determine whether any arrangement, not just contracts which purport to be service contracts, is properly treated as a lease. Consistent with the inclusive statutory language, the legislative history indicates that this list of factors is meant to be non-exclusive and constitutes a balancing test, such that the presence or absence of a single factor may not be dispositive in every case. S. Prt. No. 169 (Vol. I), 98th Cong., 2d Sess., at 138 (1984); Joint Committee on Taxation Staff, *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984*, 98th Cong., at 60 (Comm. Print 1984).

In addition, courts have also considered other factors in determining whether transactions are leases of property or the provision of services, including whether the

service provider had the right to replace the relevant property with comparable property, whether the property was a component of an integrated operation in which the service provider had other responsibilities, whether the service provider operated the equipment, and whether the service provider's fee was based on a measure of work performed rather than the mere passage of time. See, e.g., Musco Sports Lighting, Inc. v. Comm'r, T.C. Memo 1990-331, aff'd, 943 F.2d 906 (8th Cir. 1991); Xerox Corp v. U.S., 656 F.2d 659 (Ct. Cl. 1981); and Smith v. Comm'r, T.C. Memo 1989-318.

Explanation of Provisions

I. Proposed §1.861-19

Proposed §1.861-19 provides rules for classifying a cloud transaction as either a provision of services or a lease of property. Proposed §1.861-19(a) specifies that the rules apply for purposes of sections 59A, 245A, 250, 267A, 367, 404A, 482, 679, and 1059A; subchapter N of chapter 1; chapters 3 and 4; and sections 842 and 845 (to the extent involving a foreign person), as well as with respect to transfers to foreign trusts not covered by section 679.

In order to make other sections consistent with proposed §1.861-19, Example 5 in §1.937-3(e) is proposed to be removed from the rules for determining whether income is derived from sources within a U.S. possession or territory.

A. Definition of "Cloud Transaction"

Proposed §1.861-19(b) defines a cloud transaction as a transaction through which a person obtains non-de minimis on-demand network access to computer hardware, digital content (as defined in proposed §1.861-18(a)(3)), or other similar resources. This definition is not limited to computer hardware and software, or to the

IaaS, PaaS, and SaaS models described above, because it is intended also to apply to other transactions that share characteristics of on-demand network access to technological resources, including access to streaming digital content and access to information in certain databases. Although this definition is broad, it does not encompass every transaction executed or completed through the Internet. For example, proposed §1.861-19 clarifies that the mere download or other electronic transfer of digital content for storage and use on a person's computer hardware or other electronic device does not constitute on-demand network access to the digital content and so would not be considered a cloud transaction for purposes of proposed §1.861-19.

B. Classification of Cloud Transactions

1. Single Classification

Proposed §1.861-19(c) provides that a cloud transaction is classified solely as either a lease of property or the provision of services. Certain cloud transactions may have characteristics of both a lease of property and the provision of services. Such transactions are generally classified in their entirety as either a lease or a service, and not bifurcated into a lease transaction and a separate service transaction. For example, section 7701(e)(1) classifies a purported service contract as either a lease or a service contract and does not contemplate mixed classifications of a single, integrated transaction. In Tidewater v. U.S., 565 F.3d 299 (5th Cir. 2009), action on dec., 2010-01 (June 1, 2010) (Tidewater), the Fifth Circuit applied the factors in section 7701(e)(1) to determine a single character for a time charter with respect to an ocean-going vessel,

rather than following the taxpayer's allocation of consideration from the transaction into separate service and lease components.

In some cases, the facts and circumstances may support the conclusion that an arrangement involves multiple cloud transactions to which proposed §1.861-19 applies. In such cases, proposed §1.861-19 requires a separate classification of each cloud transaction except any transaction that is de minimis.

2. Determination Based on All Relevant Factors

Proposed §1.861-19(c)(1) provides that all relevant factors must be taken into account in determining whether a cloud transaction is classified as a lease of property (specifically, computer hardware, digital content (as defined in proposed §1.861-18(a)(3)), or other similar resources) or the provision of services. The relevance of any factor varies depending on the factual situation, and any particular factor may not be relevant in a given instance.

Proposed §1.861-19(c)(2) contains a non-exhaustive list of factors for determining whether a cloud transaction is classified as the provision of services or a lease of property. In general, application of the relevant factors to a cloud transaction will result in the transaction being treated as the provision of services rather than a lease of property. In addition to the statutory factors described in section 7701(e)(1), the proposed regulations set forth several factors applied by courts that the Treasury Department and the IRS have determined are relevant in demonstrating that a cloud transaction is classified as the provision of services: whether the provider has the right to determine the specific property used in the cloud transaction and replace such property with comparable property; whether the property is a component of an

integrated operation in which the provider has other responsibilities, including ensuring the property is maintained and updated; and whether the provider's fee is primarily based on a measure of work performed or the level of the customer's use rather than the mere passage of time. The proposed regulations include several examples applying the factors in proposed §1.861-19(c)(2) to different types of cloud transactions.

Certain factors that are relevant under proposed §1.861-19(c) may be the same as or similar to those used to determine whether transactions other than cloud transactions are classified as leases or services under other authorities. However, cloud transactions, which involve on-demand network access to property such as computer hardware and digital content, may have significant differences from other lease and service transactions that involve direct physical access to property.

Accordingly, the interpretation of factors and their application to cloud transactions require an analysis that is sensitive to the inherent differences between transactions involving physical access to property and transactions involving on-demand network access.

C. Classification of Cloud Transactions Related to Other Transactions

Certain arrangements may involve multiple transactions, where one or more transactions would be classified as a cloud transaction under proposed §1.861-19(b) and one or more transactions do not qualify as a cloud transaction and would be classified under other sections of the Code and regulations, or under general tax law principles. For example, an arrangement might involve both a cloud transaction and a transaction that would be classified under the rules of §1.861-18 as a lease of a copyrighted article. Proposed §1.861-19(c)(3) provides that, in such cases, the

classification rules apply only to classify the cloud transaction, and any non-cloud transaction will be classified separately under such other section of the Code or regulations, or under general tax law principles. However, for purposes of administrability, proposed §1.861-19(c)(3) provides that no transaction will be classified separately if it is de minimis. This rule is illustrated by examples contained in proposed §1.861-19(d).

II. Modifications of §1.861-18

A. Scope of Application

The preamble to the final regulations under §1.861-18 governing the classification of transactions involving computer programs (T.D. 8785, 63 FR 52971 (October 2, 1998)) indicated that §1.861-18 would apply only to such transactions because the need for guidance with respect to transactions involving computer programs was most pressing. The preamble noted, however, that the Treasury Department and the IRS may consider as part of a separate guidance project whether to apply the principles of those regulations to other transactions. Since §1.861-18 was adopted as a final regulation in 1998, content in digital format and subject to copyright law, including music, video, and books, has become a common basis for commercial transactions. Consumption of such digital content has grown in part because of new computer hardware, including laptops, tablets, e-readers, and smartphones, that allows users to more easily obtain and use digital content.

The Treasury Department and the IRS have determined that the rules and principles underlying existing §1.861-18 have provided useful guidance with respect to computer programs and that these rules and principles should apply to certain other

digital content. Accordingly, proposed §1.861-18 broadens the scope of existing §1.861-18 to apply to all transfers of “digital content,” defined in proposed §1.861-18(a)(3) as any content in digital format and that is either protected by copyright law or is no longer protected by copyright law solely due to the passage of time, whether or not the content is transferred in a physical medium. Digital content includes, for example, books, movies, and music in digital format in addition to computer programs.

Certain terms have been changed in proposed §1.861-18, including references to computer programs being replaced with references to digital content. The application of proposed §1.861-18 to digital content other than computer programs is illustrated by proposed §1.861-18(h)(19) through (21) (Examples 19 through 21).

B. Rights to Advertise Copyrighted Articles

Comments received on the proposed regulations (REG-251520-96; 61 FR 58152; November 13, 1996) (the “1996 proposed regulations”) that were finalized in 1998 as existing §1.861-18 recommended that the transfer of a right to publicly perform or display a computer program should not be considered the transfer of a copyright right if the right is limited to the advertisement of a copyrighted article and the public performance or display of the entire copyrighted article is not permitted. The recommendation of these comments was not incorporated into existing §1.861-18, but the Treasury Department and the IRS acknowledged in the preamble to existing §1.861-18 that it may be appropriate to revisit the issue in the future and observed that the transfer of such rights to advertise a copyrighted article in many cases would be de minimis under existing §1.861-18(c)(1)(ii).

In light of experience in administering existing §1.861-18, the Treasury Department and the IRS have determined that the transfer of the right to publicly perform or display digital content for the purpose of advertising the sale of the digital content should not constitute the transfer of a copyright right for purposes of those portions of the Code enumerated in §1.861-18(a)(1). For example, rights provided to a video game retailer allowing the retailer to display screenshots of a video game on television commercials promoting sales of the game generally would not, on their own, constitute a transfer of copyright rights that is significant in context. Accordingly, proposed §1.861-18 modifies existing §1.861-18(c)(2)(iii) and (iv) to provide that a transfer of the mere right to public performance or display of digital content for purposes of advertising the digital content does not by itself constitute a transfer of a copyright right.

C. Source of Income for Sales of Copyrighted Articles in Electronic Medium

Comments received on the 1996 proposed regulations addressed the sourcing of income from the sale of computer programs through electronic downloads and noted uncertainty regarding the application of the title passage rule of §1.861-7(c) to these sales of copyrighted articles. Although the preamble indicated that the parties in many cases can agree where title passes for inventory property, the final regulations under §1.861-18 included only a general reference to the relevant source rules and did not specifically address the application of the title passage rule for sales of copyrighted articles. Based on experience in administering existing §1.861-18 since 1998, the Treasury Department and the IRS have become more aware of the uncertainty associated with determining the source of sales of copyrighted articles by application of

§1.861-7(c), in particular in the context of electronically downloaded software. In many sales of copyrighted articles, the location where rights, title, and interest are transferred is not specified. In some cases, due to intellectual property law concerns, there may be no passage of legal title when the copyrighted article is sold. Moreover, the Treasury Department and the IRS have determined that contractual specification of a location -- other than the customer's location -- as the location of transfer could be easily manipulated and would bear little connection to economic reality in the case of a transfer by electronic medium of digital content, given that a sale and transfer of digital content by electronic medium generally would not be considered commercially complete until the customer has successfully downloaded the copy.

In light of these considerations, proposed §1.861-18(f)(2)(ii) provides that when copyrighted articles are sold and transferred through an electronic medium, the sale is deemed to occur at the location of download or installation onto the end-user's device used to access the digital content for purposes of §1.861-7(c). It is expected that vendors generally will be able to identify the location of such download or installation. Comments are requested as to the availability, reliability and cost of this information. In the absence of information about the location of download or installation onto the end-user's device used to access the digital content, the sale is deemed to have occurred at the location of the customer based on the taxpayer's recorded sales data for business or financial reporting purposes. Consistent with existing §1.861-18, proposed §1.861-18(f)(2)(ii) provides that income from sales or exchanges of copyrighted articles is sourced under sections 861(a)(6), 862(a)(6), 863, or 865(a), (b), (c), or (e), as appropriate. The Treasury Department and the IRS do not expect proposed §1.861-

18(f)(2)(ii) to impact the application of income tax treaties to which the United States is a party given that the taxation of gains under those treaties is generally determined by reference to the residence country of the seller and not the source of income from the sale. Income from leases of copyrighted articles is sourced under section 861(a)(4) or 862(a)(4), as appropriate.

In order to make other sections consistent with proposed §1.861-18(f)(2)(ii), a cross-reference has been added in the rules for sales of inventory property in §1.861-7(c), and Example 4 in §1.937-3(e) has been removed from the rules for determining whether income is derived from sources within a U.S. possession or territory.

III. Change in Method of Accounting

The application of these new rules for purposes of the affected Code sections may require certain taxpayers to change their methods of accounting under section 446(e) for affected transactions. Any change in method of accounting that a taxpayer makes in order to comply with these regulations would be a change initiated by the taxpayer. Accordingly, the change in method of accounting must be implemented under the rules of §1.446-1(e) and the applicable administrative procedures that govern voluntary changes in method of accounting under section 446(e).

IV. Request for Comments

Comments are requested on all aspects of these proposed regulations, including the following topics:

- (1) Whether the definition of digital content should be defined more broadly than content protected by copyright law and content that is no longer protected by copyright law solely due to the passage of time;

- (2) whether any special considerations should be taken into account in applying the rules in existing §1.861-18 to transfers of digital content other than computer programs;
- (3) whether any other aspects of existing §1.861-18 need to be modified if that section is amended as proposed;
- (4) whether the classification of cloud transactions as either a service or a lease is correct, or whether cloud transactions are more properly classified in another category (for example, a license or a sale);
- (5) realistic examples of cloud transactions that would be treated as leases under proposed §1.861-19;
- (6) the existence of arrangements involving both a transaction that would qualify as a cloud transaction and another non-de minimis transaction that would be classified under another provision of the Code or Regulations, or under general tax law principles;
- (7) potential bases for allocating consideration in arrangements involving both a transaction that would qualify as a cloud transaction and another non-de minimis transaction that would be classified under another provision of the Code or Regulations, or under general tax law principles;
- (8) administrable rules for sourcing income from cloud transactions in a manner consistent with sections 861 through 865; and
- (9) application of proposed §1.861-19 to an arrangement that involves non-de minimis rights both to access digital content on-demand over a network

and to download such digital content onto a user's electronic device for offline use.

Proposed Effective Date

The regulations are proposed to apply to taxable years beginning on or after the date of publication of the Treasury decision adopting these regulations as final regulations in the **Federal Register**. No inference should be drawn from the proposed effective date concerning the treatment of transactions involving digital content or cloud transactions entered into before the regulations are applicable. For transactions involving transfers of computer programs occurring pursuant to contracts entered into before publication of the final regulations, the rules in former §1.861-18, T.D. 8785 and T.D. 9870, will apply. For proposed dates of applicability, see §§1.861-18(i) and 1.861-19(e).

Special Analyses

Regulatory Planning and Review

Executive Orders 13563 and 12866 direct agencies to assess costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility.

These proposed rules have been designated by the Office of Management and Budget's Office of Information and Regulatory Affairs as subject to review under Executive Order 12866 pursuant to the Memorandum of Agreement (MOA)(April 11,

2018) between the Treasury Department and the Office of Management and Budget regarding review of tax regulations. The Treasury Department and the IRS project that these rules are not economically significant because current industry practice is generally consistent with the principles underlying the proposed regulations. Comments are requested as to whether this characterization of industry practice is inaccurate.

A. Background

When assessing tax on income arising from international transactions, the “source” of income is important in determining a taxpayer’s tax liability. U.S. sourcing rules, generally contained in code sections 861 to 865, determine whether income earned is considered domestic or foreign source. For U.S. resident taxpayers, the U.S. generally taxes both domestic and foreign source income and, for the latter, provides credits for foreign taxes up to the level of U.S. tax. Taxpayers with significant foreign tax credits (FTCs) typically prefer that income be considered foreign rather than U.S. source in order to maximize their use of FTCs and minimize their U.S. taxes.

Proper assessment of the source of a particular item of income depends on the nature and type (or character) of that income (for example, interest, dividend, compensation for services, royalties paid under a license, gains recorded in a sale). Source rules differ for different types of income, so it is first necessary for income tax purposes to classify the character of an item of income. In the case of transactions involving digital content and cloud transactions, the types of income most relevant are sales, licenses, and services, but there are currently no regulations specifically applicable to the classification of transactions involving digital content other than

computer programs or the classification of transactions involving remote access to digital content through the cloud. These proposed regulations provide that guidance.

The character of income also affects the U.S. taxation of income earned by U.S. taxpayers through their foreign subsidiary corporations. Certain U.S. shareholders of controlled foreign corporations (as defined in section 957) must include their share of a controlled foreign corporation's subpart F income in the U.S. shareholder's gross income on a current basis. Section 951(a)(1)(A). The characterization of income can impact whether it is considered subpart F income (as defined in section 952).

B. Need for Proposed Regulations

Transactions involving digital content and cloud computing have become common due to the growth of electronic commerce. Such transactions must be classified in terms of character in order to apply various provisions of the Code, such as sourcing rules and subpart F. Existing Reg. §1.861-18, finalized in 1998, provides rules for classifying transactions involving computer programs as, for example, a license of a computer program, a rental of a computer program, or a sale of a computer program. These existing regulations, however, do not explicitly cover transactions involving other digital content, such as digital music and video, or to cloud computing transactions, and thus taxpayers must determine how these transactions should be classified for tax purposes without clear guidance. The proposed regulations are needed to reduce this uncertainty. The proposed regulations also reduce the opportunities for taxpayers to take positions on source and character that inappropriately minimize their taxes.

C. Overview of Proposed Regulations

The proposed regulations provide updated guidance with respect to the classification of transactions involving digital content (proposed §1.861-18) and new guidance with respect to cloud transactions (proposed §1.861-19).

Existing rules, particularly final regulations under §1.861-18, which were adopted in 1998, govern the classification of transactions involving computer programs. The Treasury Department and the IRS have determined that the rules and principles underlying existing §1.861-18 provide useful guidance for transactions involving digital content. Proposed §1.861-18 broadens the scope of its application to include digital content, which is defined in proposed §1.861-18(a)(3) as any content in digital format that is either protected by copyright law or is no longer protected solely due to the passage of time (e.g., books, movies, and music in digital format, in addition to computer programs).

Cloud computing transactions, which are typically characterized by on-demand network access to computing resources, would not generally be subject to classification under existing §1.861-18 since such transactions typically do not include the transfer of a computer program, nor would such transactions be subject to proposed §1.861-18 since such transactions typically do not include the transfer of a copyright right or copyrighted article, or provision of development services related to computer programming. Consequently, proposed §1.861-19 provides rules for classifying a cloud transaction as either a provision of service or a lease of property.

D. Economic analysis

1. Baseline

The Treasury Department and the IRS have assessed the benefits and costs of the proposed regulation compared to a no-action baseline that reflects anticipated Federal income tax-related behavior in the absence of these proposed regulations.

2. Summary of Economic Effects

The proposed regulations provide certainty and clarity with respect to the characterization of income from digital transactions and cloud computing. In the absence of such guidance, the chances that different U.S. taxpayers would interpret the Code differentially, either from each other or from the intents and purposes of the underlying statutes, would be exacerbated. This divergence in interpretation could cause U.S. businesses to make economic decisions based on different interpretations of, for example, whether income from making digital music available to a user would be characterized as derived from a service or a lease transaction for purposes of applying sourcing rules and thus whether such income is considered domestic or foreign. If economic decisions are not guided by uniform incentives across otherwise similar investors and across otherwise similar investments, the resulting pattern of economic activity is generally inefficient. Thus, the Treasury Department and the IRS expect that the definitions and guidance provided in the proposed regulation will help support an efficient allocation of economic activity among taxpayers, relative to the baseline.

The characterization of income from digital transactions and cloud computing, for example, may impact taxpayer incentives under section 59A (the tax on certain base erosion payments) and section 250 (foreign derived intangible income and global intangible low-taxed income). For example, under section 59A, the characterization of a cloud transaction as a service, as opposed to a lease, may implicate the services cost

method exception under section 59A(d)(5). Such characterization may also impact the documentation requirements or eligibility for treatment as foreign-derived intangible income under section 250(b). However, because current industry practice is generally consistent with the principles underlying the proposed regulations, the Treasury Department and the IRS expect these regulations to have only a small effect on economic activity or compliance costs relative to the baseline.

The Treasury Department and IRS solicit comments on the economic effects of the proposed regulations.

3. Economic Effects of Specific Provisions

a. Transactions involving copyright-protected digital content

Existing §1.861-18 provides rules for classifying transfers of computer programs as, for example, a license of a computer program, a lease of a computer program, or a sale of a computer program. Proposed §1.861-18 broadens the scope of existing §1.861-18 to apply to all transfers of digital content. In addition, as discussed in Part II.B of the Explanation of Provisions section, proposed §1.861-18 clarifies that a transfer of the mere right to public performance or display of digital content for advertising purposes does not by itself constitute a transfer of a copyright right. Further, as explained in Part II.C of the Explanation of Provisions section, proposed §1.861-18 provides clarity around the title passage rule of §1.861-7(c) by providing that when copyrighted articles are sold, the sale is deemed to occur at the location of the download or installation onto the end-user's device, or in the absence of that information then at the location of the customer. Proposed 1.861-7(c) provides that a sale of personal property is consummated at the place where the rights, title, and interest of the

seller in the property are transferred to the buyer, or, when bare legal title is retained by the seller, where beneficial ownership passes.

In considering how the place of sale should be determined for digital content, the Treasury Department and the IRS considered, as an alternative, not issuing specific rules and instead retaining the existing rules without further clarification for copyrighted articles. The Treasury Department and the IRS elected to provide further clarity about the sourcing of income from the sale of copyrighted articles because (1) in the context of electronically downloaded software, the location in which rights, title, and interest are transferred is often difficult to determine or not specified, and (2) the location of transfer could be easily manipulated (for example, the server location from which a copyrighted article is downloaded). Consequently, for administrative and clarification purposes, proposed §1.861-18(f)(2)(ii) provides that when a copyrighted article is sold through an electronic medium, the sale is deemed to occur at the location of download or installation onto the end-user's device. The Treasury Department and the IRS are proposing this location definition because that is where the sale is completed, since until the download is complete, the content is not entirely transferred.

The Treasury Department and the IRS solicit comments on these proposed regulations and particularly solicit comments that provide data, other evidence, or models that would enhance the rigor with which the final regulations governing digital content might be developed.

b. Cloud transactions

Proposed §1.861-19 provides rules for classifying a cloud transaction as either a lease of property (i.e., computer hardware, digital content, or other similar resources) or

a provision of services. These rules contain a non-exhaustive list of factors which include statutory factors described in section 7701(e)(1) and factors applied by courts, as explained in Part I.B.2. of the Explanation of Provisions section.

As an alternative, the Treasury Department and the IRS considered not providing further specific guidance regarding how cloud computing transactions should be classified (for sourcing and other purposes). The Treasury Department and the IRS have developed the proposed regulations (proposed §1.861-18 and proposed §1.861-19) because they will provide clarity to taxpayers and the IRS when determining the character of income arising from transactions involving digital content and cloud computing. This increased clarity, relative to the baseline, will reduce the potential for tax planning strategies that exploit uncertainty resulting from the lack of explicit guidance for characterizing common transactions involving digital content and cloud computing. Consistent reporting across taxpayers also increases the IRS's ability to consistently enforce the tax rules, thus increasing equity and decreasing opportunities for tax evasion.

The Treasury Department and the IRS solicit comments on these proposed regulations and particularly solicit comments that provide data, other evidence, or models that would enhance the rigor with which the final regulations governing cloud transactions might be developed.

E. Regulatory Flexibility Act

The Regulatory Flexibility Act requires consideration of the regulatory impact on small businesses. It is hereby certified that these proposed regulations will not have a

significant economic impact on a substantial number of small entities within the meaning of section 601(6) of the Regulatory Flexibility Act (5 U.S.C. chapter 6).

As discussed elsewhere in the Special Analyses, transactions involving digital content and cloud computing have become common due to the growth of electronic commerce. Such transactions must be classified in terms of character in order to apply various provisions of the Code, such as sourcing rules and subpart F. Existing Reg. §1.861-18, finalized in 1998, provides rules for classifying transactions involving computer programs as, for example, a license of a computer program, a rental of a computer program, or a sale of a computer program. These existing regulations, however, do not explicitly cover transactions involving other digital content, such as digital music and video, or to cloud computing transactions and thus taxpayers must determine how these transactions should be classified for tax purposes without clear guidance. The proposed regulations provide certainty and clarity to these affected taxpayers.

Although data are not readily available to estimate the number of small entities that would be affected by this proposed rule, the Treasury Department and the IRS project that any economic impact of the regulations would be minimal for businesses regardless of size. These proposed regulations generally provide clarification of definitions regarding how transactions are classified, they are not expected to have an impact on burden for large or small businesses. The Treasury Department and the IRS project that any economic impact would be small because current industry practice is generally consistent with the principles underlying the proposed regulations.

Notwithstanding this certification that the proposed rule will not have a significant economic impact on a substantial number of small entities, the Treasury Department and the IRS invite comments on the impact this proposed rule would have on small entities.

Comments and Requests for a Public Hearing

Before these proposed regulations are adopted as final regulations, consideration will be given to any comments that are submitted timely to the IRS as prescribed in this preamble under the “ADDRESSES” section. All comments will be available at www.regulations.gov or upon request. A public hearing will be scheduled if requested in writing by any person that timely submits comments. If a public hearing is scheduled, notice of the date, time, and place for the public hearing will be published in the **Federal Register**.

Drafting Information

The principal author of these proposed regulations is Robert Z. Kelley of the Office of the Associate Chief Counsel (International). However, other personnel from the Treasury Department and the IRS participated in their development.

List of Subjects in 26 CFR Part 1

Income taxes, reporting, and recordkeeping requirements.

Proposed Amendments to the Regulations

Accordingly, 26 CFR Part 1 is proposed to be amended as follows:

PART 1--INCOME TAXES

Paragraph 1. The authority citation for part 1 continues to read in part as follows:

Authority: 26 U.S.C. 7805 * * *

Par. 2. Section 1.861-7 is amended by revising paragraph (c) to read as follows:

§1.861-7 Sale of personal property.

* * * * *

(c) Country in which sold. For purposes of part I (section 861 and following), subchapter N, chapter 1 of the Code, and the regulations thereunder, a sale of personal property is consummated at the time when, and the place where, the rights, title, and interest of the seller in the property are transferred to the buyer. Where bare legal title is retained by the seller, the sale shall be deemed to have occurred at the time and place of passage to the buyer of beneficial ownership and the risk of loss. For determining the place of sale of copyrighted articles transferred in electronic medium, see §1.861-18(f)(2)(ii). However, in any case in which the sales transaction is arranged in a particular manner for the primary purpose of tax avoidance, the foregoing rules will not be applied. In such cases, all factors of the transaction, such as negotiations, the execution of the agreement, the location of the property, and the place of payment, will be considered, and the sale will be treated as having been consummated at the place where the substance of the sale occurred.

* * * * *

Par. 3. Section 1.861-18 is amended as follows:

- a. For each paragraph listed in the following table, removing the language in the “Remove” column and adding in its place the language in the “Add” column.

Paragraph	Remove	Add
(a)(1)	computer programs	digital content
(b)(1) introductory text	a computer program	digital content
(b)(1)(i)	computer program	digital content
(b)(1)(ii)	computer program	digital content
(b)(1)(iii)	computer program	digital content

(b)(1)(iv)	computer programming techniques	development of digital content
(b)(2), first sentence	Any transaction	Any arrangement
(b)(2), first sentence	computer programs	digital content
(b)(2), second sentence	overall transaction	overall arrangement
(c)(1)(i), first sentence	a computer program	digital content
(c)(1)(i), third sentence	a computer program	digital content
(c)(1)(i), third sentence	that program	that digital content
(c)(1)(ii)	a computer program	digital content
(c)(1)(ii)	the computer program	the digital content
(c)(2)(i)	computer program	digital content
(c)(2)(ii)	computer programs	digital content
(c)(2)(ii)	copyrighted computer program	digital content
(c)(3), first sentence	a computer program	digital content
(c)(3), second sentence	program	digital content
(d)	a newly developed or modified computer program	newly developed or modified digital content
(d)	computer program	digital content
(e) introductory text	a computer program	digital content
(e)(1)	computer programming techniques	the development of digital content
(f)(3), subject heading	computer programs	digital content
(f)(3), first sentence	computer programs	digital content
(f)(3), second sentence	a computer program on disk	digital content on a disk
(f)(3), third sentence	program	digital content
(g)(2)	a computer program	digital content
(g)(3)(i), first sentence	a computer program	digital content
(g)(3)(i), first sentence	the program	the digital content
(g)(3)(i), first sentence	software	digital content
(g)(3)(ii), first sentence	a computer program	digital content
(g)(3)(ii), first sentence	the program	the digital content
(g)(3)(ii), second sentence	a computer program	digital content
(g)(3)(ii), second sentence	the program	the digital content

b. Amend paragraph (a)(1) by:

i. Adding before “367” sections “59A, 245A, 250, 267A,”;

ii. Removing “551,”; and

- iii. Removing “chapter 3, chapter 5” and adding in its place “chapters 3 and 4,”.
- c. Revising paragraphs (a)(3), (c)(2)(iii) and (iv), and (f)(2).
- d. Redesignating Examples 1 through 18 of paragraph (h) as paragraphs (h)(1) through (18), respectively.
- e. Adding paragraphs (h)(19) through (21).
- f. Revising paragraphs (i) and (j).
- g. Removing paragraph (k).

The revisions and additions read as follows:

§1.861-18 Classification of transactions involving digital content.

* * * * *

(a) * * *

(3) Digital content. For purposes of this section, digital content means a computer program or any other content in digital format that is either protected by copyright law or no longer protected by copyright law solely due to the passage of time, whether or not the content is transferred in a physical medium. For example, digital content includes books in digital format, movies in digital format, and music in digital format. For purposes of this section, a computer program is a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result and includes any media, user manuals, documentation, data base, or similar item if the media, user manuals, documentation, data base, or other similar item is incidental to the operation of the computer program.

* * * * *

(c) * * *

(2) * * *

(iii) The right to make a public performance of digital content, other than a right to publicly perform digital content for the purpose of advertising the sale of the digital content performed; or

(iv) The right to publicly display digital content, other than a right to publicly display digital content for the purpose of advertising the sale of the digital content displayed.

* * * * *

(f) * * *

(2) Transfers of copyrighted articles--(i) Classification. The determination of whether a transfer of a copyrighted article is a sale or exchange is made on the basis of whether, taking into account all facts and circumstances, the benefits and burdens of ownership have been transferred. A transaction that does not constitute a sale or exchange because insufficient benefits and burdens of ownership of the copyrighted article have been transferred, such that a person other than the transferee is properly treated as the owner of the copyrighted article, will be classified as a lease generating rental income.

(ii) Source. Income from transactions that are classified as sales or exchanges of copyrighted articles will be sourced under section 861(a)(6), 862(a)(6), 863, or 865(a), (b), (c), or (e), as appropriate. When a copyrighted article is sold and transferred through an electronic medium, the sale is deemed to have occurred at the location of download or installation onto the end-user's device used to access the digital

content for purposes of §1.861-7(c), subject to the tax avoidance provisions in §1.861-7(c). However, in the absence of information about the location of download or installation onto the end-user's device used to access the digital content, the sale will be deemed to have occurred at the location of the customer, which is determined based on the taxpayer's recorded sales data for business or financial reporting purposes. Income derived from leasing a copyrighted article will be sourced under section 861(a)(4) or 862(a)(4), as appropriate.

* * * * *

(h) * * *

(19) Example 19--(i) Facts. Corp A operates a website that offers electronic books for download onto end-users' computers or other electronic devices. The books offered by Corp A are protected by copyright law. Under the agreements between content owners and Corp A, Corp A receives from the content owners a digital master copy of each book, which Corp A downloads onto its server, in addition to the non-exclusive right to distribute for sale to the public an unlimited number of copies in return for paying each content owner a specified amount for each copy sold. Corp A may not transfer any of the distribution rights it receives from the content owners. The term of each agreement Corp A has with a content owner is shorter than the remaining life of the copyright. Corp A charges each end-user a fixed fee for each book purchased. When purchasing a book on Corp A's website, the end-user must acknowledge the terms of a license agreement with the content owner that states that the end-user may view the electronic book but may not reproduce or distribute copies of it. In addition, the agreement provides that the end-user may download the book onto a limited number of its devices. Once the end-user downloads the book from Corp A's server onto a device, the end-user may access and view the book from that device, which does not need to be connected to the Internet in order for the end-user to view the book. The end-user owes no additional payment to Corp A for the ability to view the book in the future.

(ii) Analysis. (A) Notwithstanding the license agreement between each end-user and content owner granting the end-user rights to use the book, the relevant transactions are the transfer of a master copy of the book and rights to sell copies from the content owner to Corp A, and the transfers of copies of books by Corp A to end-users. Although the content owner is identified as a party to the license agreement memorializing the end-user's rights with respect to the book, each end-user obtains those rights directly from Corp A, not from the content owner. Because the end-user receives only a copy of each book and does not receive any of the copyright rights described in paragraph (c)(2) of this section, the transaction between Corp A and the

end-user is classified as the transfer of a copyrighted article under paragraph (c)(1)(ii) of this section. See paragraphs (h)(1) and (2) of this section (Example 1 and Example 2). Under the benefits and burdens test of paragraph (f)(2) of this section, the transaction is classified as a sale and not a lease, because the end-user receives the right to view the book in perpetuity on its device.

(B) The transaction between each content owner and Corp A is a transfer of copyright rights. In obtaining a master copy of the book along with the right to sell an unlimited number of copies to customers, Corp A receives a copyright right described in paragraph (c)(2)(i) of this section. For purposes of paragraph (b)(2) of this section, the digital master copy is de minimis. Under paragraph (f)(1) of this section, there has not been a transfer of all substantial rights in the copyright rights to the content because each content owner retains the right to further license or sell the copyrights, subject to Corp A's interest; Corp A has acquired no right itself to transfer the copyright rights to any of the content; and the grant of distribution rights is for less than the remaining life of the copyright to each book. Therefore, the transaction between each content owner and Corp A is classified as a license, and not a sale, of copyright rights.

(20) Example 20--(i) Facts. Corp A offers end-users memberships that provide them with unlimited access to Corp A's catalog of copyrighted music in exchange for a monthly fee. In order to access the music, an end-user must download each song onto a computer or other electronic device. The end-user may download songs onto a limited number of its devices. Under the membership agreement terms, an end-user may listen to the songs but may not reproduce or distribute copies of them. Once the end-user stops paying Corp A the monthly membership fee, an electronic lock is activated so that the end-user can no longer access the music.

(ii) Analysis. The end-users receive none of the copyright rights described in paragraph (c)(2) of this section and instead receive only copies of the digital content. Therefore, under paragraph (c)(1)(ii) of this section, each download is classified as the transfer of a copyrighted article. Although an end-user will retain a copy of the content at the end of the payment term, the end-user cannot access the content after the electronic lock is activated. Taking into account the special characteristics of digital content as provided in paragraph (f)(3) of this section, the activation of the electronic lock is the equivalent of having to return the copy. Therefore, under paragraph (f)(2) of this section, each transaction is classified as a lease of a copyrighted article because the right to access the music is limited.

(21) Example 21--(i) Facts. Corp A offers a catalog of movies and TV shows, all of which are subject to copyright protection. Corp A gives end-users several options for viewing the content, each of which has a separate price. A "streaming" option allows an end-user to view the video, which is hosted on Corp A's servers, while connected to the Internet for as many times as the end-user wants during a limited period. A "rent" option allows an end-user to download the video to its computer or other electronic device (which does not need to be connected to the Internet for viewing) and watch the video as many times as the end-user wants for a limited period, after which an electronic lock

is activated and the end-user may no longer view the content. A “purchase” option allows an end-user to download the video and view it as many times as the end-user chooses with no end date. Under all three options, the end-user may view the video but may not reproduce or distribute copies of it. Under the “rent” and “purchase” options, the end-user may download the video onto a limited number of its devices.

(ii) Analysis. (A) With respect to the “rent” and “purchase” options, the end-user receives none of the copyright rights described in paragraph (c)(2) of this section but, rather, receives only copies of the digital content. Therefore, transactions under those two options are transfers of copyrighted articles. Transactions for which the end-user chooses the “purchase” option are classified as sales of copyrighted articles under the benefits and burdens test of paragraph (f)(2) of this section because the end-user receives the right to view the videos in perpetuity. Transactions under the “rent” option are classified as leases of copyrighted articles under paragraph (f)(2) of this section because the end-user’s right to view the videos is for a limited period.

(B) For transactions under the “streaming” option, there is no transfer of any copyright rights described in paragraph (c)(2) of this section. There is also no transfer of a copyrighted article, because the content is not downloaded by an end-user, but rather is accessed through an on-demand network. The transaction also does not constitute the provision of services for the development of digital content or the provision of know-how under paragraph (b)(1) of this section. Therefore, paragraph (b)(1) of this section does not apply to such transaction. Instead, the transaction is a cloud transaction that is classified under §1.861-19. See §1.861-19(d)(9).

(i) Effective date. This section applies to transactions involving the transfer of digital content, or the provision of services or of know-how in connection with digital content, pursuant to contracts entered into in taxable years beginning on or after the date of publication of a Treasury decision adopting these rules as final regulations in the **Federal Register**. For transactions involving computer programs occurring pursuant to contracts entered into in taxable years beginning before the date of publication of a Treasury decision adopting these rules as final regulations in the **Federal Register**, see §1.861-18(i) as contained in T.D. 8785 and T.D. 9870.

(j) Change in method of accounting required by this section. In order to comply with this section, a taxpayer engaging in a transaction involving digital content pursuant to a contract entered into in taxable years beginning on or after the date described in

paragraph (i) of this section may be required to change its method of accounting. If so required, the taxpayer must secure the consent of the Commissioner in accordance with the requirements of §1.446-1(e) and the applicable administrative procedures for obtaining the Commissioner's consent under section 446(e) for voluntary changes in methods of accounting.

Par. 4. Section 1.861-19 is added to read as follows:

§1.861-19 Classification of cloud transactions.

(a) In general. This section provides rules for classifying a cloud transaction (as defined in paragraph (b) of this section) either as a provision of services or as a lease of property. The rules of this section apply for purposes of Internal Revenue Code sections 59A, 245A, 250, 267A, 367, 404A, 482, 679, and 1059A; subchapter N of chapter 1; chapters 3 and 4; and sections 842 and 845 (to the extent involving a foreign person), and apply with respect to transfers to foreign trusts not covered by section 679.

(b) Cloud transaction defined. A cloud transaction is a transaction through which a person obtains on-demand network access to computer hardware, digital content (as defined in §1.861-18(a)(3)), or other similar resources, other than on-demand network access that is de minimis taking into account the overall arrangement and the surrounding facts and circumstances. A cloud transaction does not include network access to download digital content for storage and use on a person's computer or other electronic device.

(c) Classification of transactions--(1) In general. A cloud transaction is classified solely as either a lease of computer hardware, digital content (as defined in §1.861-18(a)(3)), or other similar resources, or the provision of services, taking into account all

relevant factors, including the factors set forth in paragraph (c)(2) of this section. The relevance of any factor varies depending on the factual situation, and one or more of the factors set forth in paragraph (c)(2) of this section may not be relevant in a given instance. For purposes of this paragraph (c), computer hardware, digital content, or other similar resources are referred to as “the property,” and the party to the transaction making such property available to customers for use is referred to as “the provider.”

(2) Factors demonstrating classification as the provision of services. Factors demonstrating that a cloud transaction is classified as the provision of services rather than a lease of property include the following factors—

- (i) The customer is not in physical possession of the property;
- (ii) The customer does not control the property, beyond the customer’s network access and use of the property;
- (iii) The provider has the right to determine the specific property used in the cloud transaction and replace such property with comparable property;
- (iv) The property is a component of an integrated operation in which the provider has other responsibilities, including ensuring the property is maintained and updated;
- (v) The customer does not have a significant economic or possessory interest in the property;
- (vi) The provider bears any risk of substantially diminished receipts or substantially increased expenditures if there is nonperformance under the contract;
- (vii) The provider uses the property concurrently to provide significant services to entities unrelated to the customer;

(viii) The provider's fee is primarily based on a measure of work performed or the level of the customer's use rather than the mere passage of time; and

(ix) The total contract price substantially exceeds the rental value of the property for the contract period.

(3) Application to arrangements comprised of multiple transactions. An arrangement comprised of multiple transactions generally requires separate classification for each transaction. If at least one of the transactions is a cloud transaction, but not all of the transactions are cloud transactions, this section applies only to classify the cloud transactions. However, any transaction that is de minimis, taking into account the overall arrangement and the surrounding facts and circumstances, will not be treated as a separate transaction, but as part of another transaction.

(d) Examples. The provisions of this section may be illustrated by the examples in this paragraph (d). For purposes of this paragraph, unless otherwise indicated, Corp A is a domestic corporation; Corp B is a foreign corporation; end-users are individuals; and no rights described in §1.861-18(c)(2) (copyright rights) are transferred as part of the transactions described.

(1) Example 1: Computing capacity--(i) Facts. Corp A operates data centers on its premises in various locations. Corp A provides Corp B computing capacity on Corp A's servers in exchange for a monthly fee based on the amount of computing power made available to Corp B. Corp B provides its own software to run on Corp A's servers. Depending on utilization levels, the servers accessed by Corp B may also be used simultaneously by other customers. The computing capacity provided to Corp B can be sourced from a variety of servers in one or more of Corp A's data centers, and Corp A determines how its computing resources are allocated among customers. Corp A agrees to keep the servers operational, including by performing physical maintenance and repair, and may replace any server with another server of comparable functionality. Corp A agrees to provide Corp B with a payment credit for server downtime. Corp B has no ability to physically alter any server.

(ii) Analysis. (A) The computing capacity transaction between Corp A and Corp B is a cloud transaction described in paragraph (b) of this section because Corp B obtains a non-de minimis right to on-demand network access to computer hardware of Corp A.

(B) Corp B has neither physical possession of nor control of the servers, beyond Corp B's right to access and use the servers. Corp A may replace any server with a functionally comparable server. The servers are a component of an integrated operation in which Corp A has other responsibilities, including maintaining the servers. The transaction does not provide Corp B with a significant economic or possessory interest in the servers. The agreement provides that Corp A will provide Corp B with a payment credit for server downtime, such that Corp A bears risk of substantially diminished receipts in the event of contract nonperformance. The servers may, depending on utilization levels, be used by Corp A to provide significant computing capacity to entities unrelated to Corp B. Corp A is compensated according to the level of Corp B's use (that is, the amount of computing power made available) and not solely based on the passage of time. Taking into account all of the relevant factors, the transaction between Corp A and Corp B is classified as the provision of services under paragraph (c) of this section.

(2) Example 2: Computing capacity on dedicated servers--(i) Facts. The facts are the same as in paragraph (d)(1)(i) of this section (the facts in Example 1), except that, in order to offer more security to Corp B, Corp A provides Corp B computing capacity exclusively through designated servers, which are owned by Corp A and located at Corp A's facilities. Corp A agrees not to use a designated server for any other customer for the duration of its arrangement with Corp B. Corp A's compensation reflects a substantial return for maintaining the servers in addition to the rental value of the servers.

(ii) Analysis. (A) As in paragraph (d)(1) of this section, the transaction between Corp A and Corp B is a cloud transaction described in paragraph (b) of this section because Corp B obtains a non-de minimis right to on-demand network access to computer hardware resources of Corp A.

(B) The fact that Corp A provides computing capacity to Corp B through designated servers indicates that such servers are not used concurrently by other Corp A customers. However, Corp A retains physical possession of the servers. In addition, Corp A's sole responsibility for maintaining the servers, and its sole right to replace or physically alter the servers, indicate that Corp A controls the servers. Although Corp B obtains the exclusive right to use certain servers, Corp B does not have a significant economic or possessory interest in the servers because, among other things, Corp A retains the right to replace the servers, Corp A bears the risk of damage to the servers, and Corp B does not share in cost savings associated with the servers because the fee paid by Corp B to Corp A does not vary based on Corp A's costs. The compensation to Corp A substantially exceeds the rental value of the servers. The other relevant factors

are analyzed in the same manner as paragraph (d)(1) of this section. Taking into account all of these factors, the transaction between Corp A and Corp B is classified as a provision of services under paragraph (c) of this section.

(3) Example 3: Access to software development platform and website hosting--(i)
Facts. Corp A provides Corp B a software platform that Corp B uses to develop and deploy websites with a range of features, including blogs, message boards, and other collaborative knowledge bases. The software development platform consists of an operating system, web server software, scripting languages, libraries, tools, and back-end relational database software and allows Corp B to use in its websites certain visual elements subject to copyrights held by Corp A. The software development platform is hosted on servers owned by Corp A and located at Corp A's facilities. Corp B's finished websites are also hosted on Corp A's servers. The software development platform and servers are also used concurrently to provide similar functionality to Corp A customers unrelated to Corp B. Corp B accesses the software development platform via a standard web browser. Corp B has no ability to alter the software code. A small amount of scripting code is downloaded onto Corp B's computers to facilitate secure logins and access to the software development platform. All other functions of the software development platform execute on Corp A's servers, and no portion of the core software code is ever downloaded by Corp B or Corp B's customers. Corp A is solely responsible for maintaining the servers and software development platform, including ensuring continued functionality and compatibility with Corp B's browser, providing updates and fixes to the software for the duration of the contract with Corp B, and replacing or upgrading the servers or software at any time with a functionally similar version. Corp B pays Corp A a monthly fee for the platform and website hosting that takes into account the storage requirements of Corp B's websites and the amount of website traffic supported, but there is no stand-alone fee for use of the software development platform. Corp B agrees to pay for Corp A's website hosting services for a minimum period, after which Corp B may continue to pay for Corp A's website hosting services or transfer its developed websites to a different hosting provider. Corp A agrees to provide Corp B with a payment credit for server downtime.

(ii) Analysis. (A) Corp A's provision to Corp B of access to the software platform is a cloud transaction described in paragraph (b) of this section because Corp B obtains a non-de minimis right to on-demand network access to computer hardware and software resources of Corp A. Corp A's hosting of Corp B's finished websites is part of the provision of access to the software platform and hardware.

(B) Corp B does not have physical possession of the software platform or servers. Although Corp B uses Corp A's platform to develop and deploy websites, Corp B does not maintain the software platform or the servers on which it is hosted, and Corp B cannot alter the software platform. Accordingly, Corp B does not control the software platform or the servers. Corp A maintains the right to replace or upgrade the software platform and servers with functionally similar versions. The servers and software platform are components of an integrated operation in which Corp A has various responsibilities, including maintaining the servers and updating the software. Corp B does not have a significant economic or possessory interest in Corp A's software

platform or servers. Corp B may lose revenue with respect to the websites that it deploys on Corp A's servers when the servers are down; nonetheless, Corp A bears the risk of substantially diminished receipts in the event of contract nonperformance because Corp A will provide Corp B with a payment credit for server downtime. Corp A provides access to the servers and platform to Corp B and other customers concurrently. Corp A is compensated based on Corp B's level of use (that is, the amount of computing resources provided) and not solely by the passage of time. Taking into account all of the factors, the transaction between Corp A and Corp B is classified as a provision of services under paragraph (c) of this section.

(C) Although the download of a small amount of scripting code to facilitate logins and access to the software platform would otherwise constitute a transfer of a computer program, instead of a cloud transaction under paragraph (b) of this section, the download is de minimis in the context of the overall arrangement, and therefore, under paragraph (c)(3) of this section, there is no separate classification of the download. Similarly, the fact that Corp B receives rights to publicly display certain copyrighted visual elements resulting from Corp A's software development platform on Corp B's own websites, which would otherwise constitute a transfer of copyright rights under §1.861-18, instead of a cloud transaction under paragraph (b) of this section, does not require separate classification because the right to use such elements is also de minimis. Thus, under paragraph (c) of this section, the entire arrangement is classified as a service.

(4) Example 4: Access to software--(i) Facts. The facts are the same as in paragraph (d)(3)(i) of this section (the facts in Example 3), except that, instead of providing website development software, Corp A provides Corp B access to customer relationship management software under several options such as "entry-level," "mid-level," and "advanced-level," via a standard web browser, which Corp A hosts on its servers for a monthly subscription fee. Corp B has no ability to alter the software code, and Corp A agrees to make available new versions of the software as they are developed for the duration of Corp B's contract, and to ensure servers' uptime in accordance with the service level agreement.

(ii) Analysis. (A) As in paragraph (d)(3) of this section, the transaction between Corp A and Corp B is a cloud transaction described in paragraph (b) of this section because Corp B obtains a non-de minimis right to on-demand network access to computer hardware and software resources of Corp A.

(B) The relevant factors are analyzed in the same manner as in paragraph (d)(3) of this section, except that compensation due to Corp A is determined based on the option chosen and the passage of time rather than a measure of computing resources utilized. Although as a general matter compensation based on the passage of time is more indicative of a lease than a service transaction, that factor is outweighed by the other factors, which support classification as a service transaction. Taking into account all of the factors, the transaction between Corp A and Corp B is classified as a provision of services under paragraph (c) of this section.

(5) Example 5: Downloaded software subject to §1.861-18--(i) Facts. Corp A provides software for download to Corp B that enables Corp B to create a scalable, shared pool of computing resources over Corp B's own network for use by Corp B's employees. Corp B downloads the software, which runs solely on Corp B's servers. Corp A provides Corp B with free updates for download as they become available. Corp B pays Corp A an annual fee, and, upon termination of the arrangement, an electronic lock is activated that prevents Corp B from further using the software.

(ii) Analysis. Under paragraph (b) of this section, the download of software for use with Corp B's computer hardware does not constitute on-demand network access by Corp B to Corp A's software. Accordingly, the transaction between Corp A and Corp B is not a cloud transaction described in paragraph (b) of this section. Because the transaction involves the transfer of digital content as defined in §1.861-18(a)(3), it is classified under §1.861-18.

(6) Example 6: Access to online software via an application--(i) Facts. Corp A provides Corp B word processing, spreadsheet, and presentation software and allows employees of Corp B to access the software over the Internet through a web browser or an application ("app"). In order to access the software from a mobile device, Corp B's employees usually download Corp A's app onto their devices. To access the full functionality of the app, the device must be connected to the Internet. Only a limited number of features on the app are available without an Internet connection. Corp B has no ability to alter the software code. The software is hosted on servers owned by Corp A and located at Corp A's facilities and is used concurrently by other Corp A customers. Corp A is solely responsible for maintaining and repairing the servers and software, and ensuring continued functionality and compatibility with Corp B's employees' devices and providing updates and fixes to the software (including the app) for the duration of the contract with Corp B. Corp B pays a monthly fee based on the number of employees with access to the software. Upon termination of the arrangement, Corp A activates an electronic lock preventing Corp B's employees from further utilizing the app, and Corp B's employees are no longer able to access the software via a web browser.

(ii) Analysis. (A) Corp A's provision to Corp B of a non-de minimis right to on-demand network access to Corp A's computer hardware and software resources for the purpose of fully utilizing Corp A's software is a cloud transaction described in paragraph (b) of this section.

(B) Corp B has neither physical possession of nor control over Corp A's word processing, spreadsheet, and presentation software or computer hardware. Additionally, the servers and software are part of an integrated operation in which Corp A maintains the servers and updates the software. Corp A makes available its word processing, spreadsheet, and presentation software and servers to Corp B and other customers concurrently. Corp A's compensation, though based in part on the passage of time, is also determined by reference to Corp B's level of use (that is, the number of Corp B employees with access to the software). Taking into account all of the factors, the transaction between Corp A and Corp B is classified as the provision of services under paragraph (c) of this section.

(C) The provision of the app to Corp B's employees by download onto their devices would be a transfer of a computer program rather than a cloud transaction subject to paragraph (b) of this section. However, under paragraph (c)(3) of this section, it is necessary to consider whether that transfer is de minimis in the context of the overall arrangement and in light of the surrounding facts and circumstances. Here, the significance of the download of the app by Corp B's employees is limited by the fact that the device running the app must be connected to Corp A's servers via the Internet to enable most of the app's core functions. The software that enables such functionality remains on Corp A's servers and is accessed through an on-demand network by Corp B's employees. Therefore, the download of the app is de minimis, and under paragraph (c)(3) of this section, the entire arrangement is classified as a service.

(7) Example 7: Access to offline software with limited online functions--(i) Facts. Corp A provides Corp B word processing, spreadsheet, and presentation software that is functionally similar to the software in paragraph (d)(6) of this section (Example 6). The software is made available for access over the Internet but only to download the software onto a computer or onto a mobile device in the form of an app. The downloaded software contains all the core functions of the software. Employees of Corp B can use the software on their computers or mobile devices regardless of whether their computer or mobile device is online. When online, the software provides a few ancillary functions that are not available offline, such as access to document templates and data collection for diagnosing problems with the software. Whether working online or offline, Corp B employees can store their files only on their own computer or mobile device, and not on Corp A's data storage servers. Because the software provides near full functionality without access to Corp A's servers, it requires more computing resources on employees' computers and devices than the app in paragraph (d)(6) of this section. Corp B's employees can also download updates to the software as part of the monthly fee arrangement. Upon termination of the arrangement, an electronic lock is activated so that the software can no longer be accessed.

(ii) Analysis. The provision of the software constitutes a lease of a copyrighted article under §1.861-18. See §1.861-18(h)(4). The access to the online ancillary functions otherwise would constitute a cloud transaction under paragraph (b) of this section, but the access to these functions is de minimis in the context of the overall arrangement, considering that the core functions are available offline through the downloaded software. Because there is no cloud transaction described in paragraph (b) of this section, this section does not apply.

(8) Example 8: Data storage, separate from access to offline software--(i) Facts. The facts are the same as in paragraph (d)(7)(i) of this section (the facts in Example 7), except that Corp A also provides data storage to Corp B on Corp A's server systems in exchange for a monthly fee based on the amount of data storage used by Corp B. Under the data storage terms, Corp B employees may store files created by Corp B employees using Corp A's software or other software. Although Corp A's word processing software is compatible with Corp A's data storage systems, the core functionality of Corp A's software is not dependent on Corp B's purchase of the storage plan. Depending on utilization levels, the server systems providing data storage to Corp

B may also be used simultaneously for other customers. The data storage provided to Corp B can be sourced from a variety of server systems in one or more of Corp A's data centers, and Corp A determines how its computing resources are allocated among customers. Corp A agrees to keep the server systems operational, including by performing physical maintenance and repair, and may replace any server system with another one of comparable functionality. Corp A agrees to provide Corp B with a payment credit for server downtime. Corp B has no ability to physically alter the server systems.

(ii) Analysis. (A) Corp A's provision of software and data storage capacity constitute separate transactions, and neither is de minimis. Therefore, under paragraph (c)(3) of this section, the transactions are classified separately.

(B) As in paragraph (d)(7), Corp B's download of fully functional software, along with on-demand network access to certain limited online features, does not constitute a cloud transaction, but rather constitutes a lease of a copyrighted article under §1.861-18.

(C) Corp A's provision of data storage constitutes a cloud transaction because Corp B obtains a non-de minimis right to on-demand network access to computer hardware of Corp A.

(D) Corp B has neither physical possession of nor control of the server systems, beyond Corp B's right to access and use the servers. Corp A may replace any server with a functionally comparable server. The server systems are a component of an integrated operation in which Corp A has other responsibilities, including maintaining the server systems. The transaction does not provide Corp B with a significant economic or possessory interest in the servers. The servers may, depending on utilization levels, be used by Corp A to provide significant services to entities unrelated to Corp B. Corp A is compensated according to the level of Corp B's use (that is, the amount of data storage used by Corp B) and not solely based on the passage of time. Because Corp A will provide Corp B with a payment credit for server downtime, Corp A bears risk of substantially diminished receipts in the event of contract nonperformance. Taking into account all of these factors, the transaction for data storage is classified as a provision of services under paragraph (c) of this section.

(9) Example 9: Streaming digital content using third-party servers--(i) Facts. Corp A streams digital content in the form of videos and music to end-users from servers located in data centers owned and operated by Data Center Operator. Data Center Operator's content delivery network facility services multiple customers. Each end-user uses a computer or other electronic device to access unlimited streaming video and music in exchange for payment of a flat monthly fee to Corp A. The end-user may select from among the available content the particular video or song to be streamed. Corp A continually updates its content catalog, replacing content with higher quality versions and adding new content at no additional charge to the end-user. Content that is streamed to the end-user is not stored locally on the end-user's computer or other electronic device and therefore can be played only while the end-

user's computer or other electronic device is connected to the Internet. Corp A pays Data Center Operator a fee based on the amount of data storage used and computing power made available in connection with Corp A's content streaming. The storage and computing power provided to Corp A can be sourced from a variety of servers in one or more of Data Center Operator's facilities, and Data Center Operator determines how computing resources are allocated among its customers. Data Center Operator covenants to keep the servers operational, including performing physical maintenance and repair. Corp A has no right or ability to physically alter the servers.

(ii) Analysis. (A) The relevant factors for classifying the transaction between Corp A and Data Center Operator are analyzed in the same manner as the computing capacity and data storage transactions in paragraphs (d)(1) and (8) of this section (Example 1 and Example 8), respectively, such that the transaction between Corp A and Data Center Operator is classified as a provision of services by Data Center Operator to Corp A under paragraph (c) of this section.

(B) A transaction between Corp A and an end-user is a cloud transaction described in paragraph (b) of this section because the end-user obtains a non-de minimis right to on-demand network access to digital content of Corp A.

(C) An end-user has neither physical possession of nor control of the digital content. Additionally, Corp A has the right to determine the digital content used in the cloud transaction and retains the right to modify its selection of digital content. Digital content accessed by end-users is a component of an integrated operation in which Corp A's other responsibilities include maintaining and updating its content catalog. Corp A's end-users do not obtain a significant economic or possessory interest in any of the digital content in Corp A's catalog. The digital content provided by Corp A may be accessed concurrently by multiple unrelated end-users. Although, as a general matter, compensation based on the passage of time is more indicative of a lease than a service transaction, that factor is outweighed by the other factors, which support a services classification. Taking into account all of the factors, a transaction between an end-user and Corp A is classified as a provision of services under paragraph (c) of this section.

(10) Example 10: Downloaded digital content subject to §1.861-18--(i) Facts. Corp A offers digital content in the form of videos and music solely for download onto end-users' computers or other electronic devices for a fee. Once downloaded, the end-user accesses the videos and songs from the end-user's computer or other electronic device, which does not need to be connected to the Internet in order to play the content. The end-user owes no additional payment to Corp A for the ability to play the content in the future.

(ii) Analysis. Under paragraph (b) of this section, the download of digital content onto an end-user's computer for storage and use on that computer does not constitute on-demand network access by the end-user to the digital content of Corp A. Accordingly, the transaction between the end-user and Corp A is not a cloud transaction described in paragraph (b) of this section, and this section does not apply to the

transaction. Because the transaction involves the transfer of digital content as defined in §1.861-18(a)(3), it will be classified under §1.861-18. See §1.861-18(h)(21).

(11) Example 11: Access to online database--(i) Facts. Corp A offers an online database of industry-specific materials. End-users access the materials through Corp A's website, which aggregates and organizes information topically and hosts a proprietary search engine. Corp A hosts the website and database on its own servers and provides multiple end-users access to the website and database concurrently. Corp A is solely responsible for maintaining and replacing the servers, website, and database (including adding or updating materials in the database). End-users have no ability to alter the servers, website, or database. Most materials in Corp A's database are publicly available by other means, but Corp A's website offers an efficient way to locate and obtain the information on demand. Certain materials in Corp A's database constitute digital content within the meaning of §1.861-18(a)(3), and Corp A pays the copyright owners a license fee for using them. Each end-user may download any of the materials to its own computer and keep such materials without further payment. The end-user pays Corp A a fee based on the number of searches or the amount of time spent on the website, and such fee is not dependent on the amount of materials the end-user downloads. The fee that the end-user pays is substantially higher than the stand-alone charge for accessing the same digital content outside of Corp A's system.

(ii) Analysis. (A) Corp A's provision to an end-user of access to Corp A's website and online database is a cloud transaction described in paragraph (b) of this section because the end-user obtains a non-de minimis right to on-demand access to Corp A's computer hardware and software resources.

(B) An end-user's downloading of the digital content would be classified as a sale of copyrighted articles under §1.861-18. Nonetheless, taking into account the entire arrangement, including that the primary benefit to the end-user is access to Corp A's database and its proprietary search engine, and that the stand-alone charge for accessing the digital content would be substantially less than the fee Corp A charges, the downloads are de minimis. Accordingly, under paragraph (c)(3) of this section, there is no separate classification of the downloads.

(C) The end-user has neither physical possession of nor control of the database, software, or the servers that host the database or software. Corp A retains the right to replace its servers and update its software and database. The database, software, and servers are part of an integrated operation in which Corp A is responsible for curating the database, updating the software, and maintaining the servers. Corp A provides each end-user on-demand network access to its software and online database concurrently with other end-users. Certain end-users pay Corp A a fee based on time spent on Corp A's website, which could be construed as compensation based on the passage of time and thus be more indicative of a lease than a service transaction. However, the fee that the end-user pays is substantially higher than the stand-alone charge for accessing the same digital content outside of Corp A's system. Accordingly, on balance, the fee arrangement supports the classification of the transaction as a service transaction. Taking into account all of these factors, the arrangement between

end-users and Corp A is treated as the provision of services under paragraph (c) of this section.

(e) Effective/applicability date. This section applies to cloud transactions occurring pursuant to contracts entered into in taxable years beginning on or after the date of publication of a Treasury decision adopting these rules as final regulations in the **Federal Register**.

(f) Change in method of accounting required by this section. In order to comply with this section, a taxpayer engaging in a cloud transaction pursuant to a contract entered into on or after the date described in paragraph (e) of this section may be required to change its method of accounting. If so required, the taxpayer must secure the consent of the Commissioner in accordance with the requirements of §1.446-1(e) and the applicable administrative procedures for obtaining the Commissioner's consent under section 446(e) for voluntary changes in methods of accounting.

§1.937-3 [Amended]

Par. 5. Section 1.937-3 is amended by removing Examples 4 and 5 from paragraph (e).

Kirsten Wielobob,

Deputy Commissioner for Services and Enforcement
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