

Proposed Model Definition of Automated Digital Product, Regulations, and Related Exemption

Drafter's Notes:

The statutory definition of “automated digital product” is intended to be added to existing statutory sales tax definitions. The definition is intended to be accompanied by an amendment to the existing sales tax imposition statute, such that “automated digital products” are included in the sales tax base with other taxable items.

The model definition is not intended to be a “uniform” definition appropriate for every state sales tax scheme. Rather, the definition is a model to be used by states that tax most tangible personal property, but tax only a limited number of services. The model would expand the tax base to include digital products that might be otherwise be nontaxable “services,” but the *human* service component is minimal. The tax on automated digital product could be further narrowed by taxing only specific types of automated digital products, or by excluding specific types of automated digital products. The model would not prevent a state from also taxing digital products that are not automated.

In some instances, the definition may overlap with existing definitions of other taxable products that have a different tax rate, such as communication or telecommunication services. In those instances, language should be added to exclude the other products from the definition.

The rules facilitate the determination of whether a product is an “automated digital product.” The text could be incorporated into the statute itself, but the level of detail is typically incorporated into rules, as is done with the detailed descriptions of the “specified digital products” that are incorporated into the rules of the Streamlined Sales Tax Agreement.

Existing bundling and sourcing provisions should be reviewed and revised if necessary to accommodate the addition of “automated digital products” to the tax base.

Existing exemptions and exemption procedures should be reviewed to determine applicability. If a state has other exemptions that are limited to tangible personal

property or taxable services, the state should consider expanding the exemptions to explicitly cover automated digital products.

Model Statutes:

Definition: “Automated digital product” - an item, including software or a service or a right to access or use the item regardless of duration, that is provided in a binary format and for which additional human intervention required to produce the same or a substantially similar item for additional customers is minimal.

Exemption: A product is exempt from taxation as an automated digital product if the product will be used predominantly for a trade or business.

Model Rules:

1. In determining whether a product requires minimal human intervention, the definition only looks to the supplier of the service, without regard to any human intervention on the side of the user (e.g., where the user may input certain parameters into an automated system to obtain a customized result). Furthermore, the definition focuses on the human effort to provide the product and therefore does not include human effort in creating or supporting the system by which the item is provided, such as setting up the system environment needed for the provision of the product, maintaining and updating the system environment, dealing with system errors, or making other generic, non-specific adjustments unrelated to individual user requests. Finally, the threshold of minimal human intervention would not be crossed where the provision of the same or similar product to new users generally requires very limited human response to individual user requests / input or where in individual cases involving particular, more complex problems, the program running the system directs the customer to a staff member.

Source - The text is based on [United Nations Model Double Taxation Convention Between Developed and Developing Countries](#) (2021) Commentary on Article 12B ¶ 53 and [OECD, “Tax Challenges Arising from Digitalisation – Report on Pillar One Blueprint: Inclusive Framework on BEPS”](#) Box 2.2.

2. An indicator of an “automated digital product” is the ability to scale up and provide the same type of product to new users with minimal human intervention. This

aspect aims to identify products that benefit from significant economies of scale, rather than to suggest that there is no human involvement required in the business. For many businesses with automated digital products, developing the system that delivers the product may require a large degree of upfront human effort and capital inputs (such as creating algorithms to deliver the automated product, including tailoring the offering to the user's preferences). The definition distinguishes products by looking to whether the marginal cost in terms of additional human effort to provide the same or substantially similar product to additional users is nil or almost nil. In other words, after the product is developed (such as the music catalogue or social media platform), the business can provide that product to one user or to many users with the same basic process; whereas a business with a nonautomated product would see a proportionate increase in the costs per unit in connection with providing the product to new customers.

Source - The text is based on [United Nations Model Double Taxation Convention Between Developed and Developing Countries](#) (2021) Commentary on Article 12B ¶ 54 and [OECD, "Tax Challenges Arising from Digitalisation – Report on Pillar One Blueprint: Inclusive Framework on BEPS" Box 2.2.](#)

3. Some transactions involving automated digital products may be preempted by the Internet Tax Freedom Act.

Explanation:

In principle, a retail sales tax should be a broad-based single-stage levy on consumer expenditures with a low tax rate. In practice, in most states, the sale of tangible personal property is generally taxed, while only the sale of specific services is taxed. The model statute is intended to expand the tax base to digital products in which the human service component is minimal. In some cases, the definition may overlap with existing definitions of taxable tangible personal property, taxable computer programs or software, and taxable services. For example, a compact disc of recorded music may be taxable tangible personal property and an automated digital product. A music "streaming service" may be a taxable service and an automated digital product. The overlap should be inconsequential if the tax rate is the same.

In some instances, the definition may overlap with existing definitions of other taxable products that have a different tax rate, such as communication or telecommunication services. In those instances, language should be added to exclude the other products from the definition.

The reference in the definition to the possible inclusion of software and services is not essential, but has been added to acknowledge the potential overlap and to explicitly eliminate the traditional boundaries of software and services. To comply with the specific enumeration requirement of section 332 of the Streamlined Sales Tax Agreement, the definition specifically includes the right to access or use the item regardless of duration.

Unlike the Streamlined Sales Tax Agreement definitions for “specified digital products,” the definition of “automated digital product” does not require that the product be transferred electronically. The method of transfer is not a criterion because it might facilitate arguments that the model discriminates against products transferred over the Internet, in violation of the Internet Tax Freedom Act.

One criterion for the definition is that the item must be in a binary format. Binary format is the current, basic characteristic of a product that is digital. If a state wanted to future-proof the definition for quantum computing, it could add “qubit format” as an additional format, or add other future-proofing language.

A second criterion considers the degree of human intervention by the service provider to provide the product for use by other customers. The objective is to make the definition more compatible with the selective tax systems of the many states that do not broadly tax personal or professional services. If humans are more than minimally involved in providing the digital product to individual customers, the product will not be included in the tax base as an automated digital product.

A third criterion, expressed as an exemption, is that the automated digital product be used predominantly for a trade or business. The term “trade or business” is used in federal Internal Revenue Code and Treasury Regulations, and federal interpretations could be used for guidance. The objective of the exemption is to prevent the

pyramiding of taxes. The criterion is drafted as an exemption because it depends upon the use of the product, a characteristic that is determined by the buyer.

Since the exempt use is determined by the customer, the customer will have to declare the exempt use by using existing state procedures, such as submitting an exemption certificate, or by a new procedure drafted to complement the exemption. The need for customers to provide documentation to sellers could be reduced by the use of rebuttable presumptions for products that would only have a business purpose.

The exemption for predominant use in a trade or business is limited to the sale of products as automated digital products, and is not intended as an expansion of the exemption to the sale of other types of taxable items. For example, if the sale of an automated digital product used in a trade or business would be taxable in a state as the non-exempt sale of tangible personal property or the non-exempt sale of a taxable service, it would remain taxable.

The business purpose exemption is an essential complement to the definition of “automated digital product” because the exemption eliminates the taxation of transactions traditionally treated as the nontaxable sale of intangible rights, such as the sale of digital publishing or performing rights. Section 332 of the Streamlined Sales Tax Agreement achieves a similar result for the taxation of “specified digital products” by only imposing the tax on an “end user” unless specified otherwise. Under the Agreement, an “end user” includes any person other than a person who receives by contract a product for further commercial broadcast, rebroadcast, transmission, retransmission, licensing, relicensing, distribution, redistribution or exhibition of the product, in whole or in part, to another person or persons.

Application of the Definition:

The publication or public performance of a copyrighted work in a digital format for a fee would generally constitute the sale of an automated digital product. Examples include the sale of downloaded digital books or music, the sale of music or video streaming service subscriptions, the sale of digital access to a live-streamed event, and

the sale of digital recordings on tangible storage media such as compact discs. However, the sale of publishing or performance rights to a business would be exempt.

The definition of “automated digital product” would include some services preempted by the Internet Tax Freedom Act. A model rule acknowledges that possibility but does not articulate specific products that would be preempted because of the uncertainty regarding the scope of the moratorium on discriminatory taxes, because of the complex definitions relating to the moratorium on “internet access,” and because of the complex requirements of the exceptions to the moratorium. A state would be free to adopt a more elaborate explanation.

In many cases, the determination of minimal human intervention will be clear. But, the concept could be difficult to apply in some situations. In those situations, states could look to guidance from organizations that have used the concept in other contexts, including:

- the definition of “automated digital service” in the [United Nations Model Double Taxation Convention Between Developed and Developing Countries](#) (2021) Article 12B ¶ 5.
- the definition of “automated digital service” in the [OECD, “Tax Challenges Arising from Digitalisation – Report on Pillar One Blueprint: Inclusive Framework on BEPS”](#) (2020) Box 2.1, and
- the definition of “electronically supplied service” in the [Council of the European Union Implementing Regulation No. 282/2011](#) (2011) Article 7.

States would not be bound by published guidance, but could use published guidance as reference material for interpreting “minimal human intervention.” E.g.:

- [United Nations Model Double Taxation Convention Between Developed and Developing Countries](#) (2021) Commentary on Article 12B ¶ 53, 54.
- [OECD, “Tax Challenges Arising from Digitalisation – Report on Pillar One Blueprint: Inclusive Framework on BEPS”](#), Box 2.2
- [Value Added Tax Committee Working Paper No. 843](#) (2015).
- [Value Added Tax Committee Working Paper No. 896](#) (2016).
- [Value Added Tax Committee Working Paper No. 919](#) (2017).
- [Value Added Tax Committee Working Paper No. 990](#) (2020).

Examples:

- An online seminar in which the customer can ask questions and receive feedback during the seminar would not be an “automated digital product” because the human intervention in providing the product for individual customers would be more than minimal. See, Value Added Tax Committee Working Paper No. 919 § 3.1.3 (2017).
- The charge for an attorney’s title opinion received by the customer in a binary format, such as Portable Document Format (PDF), would not constitute the sale of an automated digital product because the title opinion is customized for each individual customer by the attorney. See, Value Added Tax Committee Working Paper No. 919 § 3.1.5 (2017).
- A supply of services by a website providing automatic search and filter functions for dating purposes stays within the limits of “minimal human intervention.” However, if individual advice/assessment of the chances to succeed in the relationship/etc., is performed by a human being at the request of the customer, “minimal human intervention” is exceeded. Where the consideration paid includes the automatic search and the possibility for the customer to have individual assessment, then this is not an automated digital product, even if the customer does not use this possibility of individual assessment. Where there are two different services, with different considerations, the automatic search service will be an automated digital product and the search service that includes a human assessment will not be an automated digital product. See, Value Added Tax Committee Working Paper No. 919 § 3.1.5 (2017).

A state should review its bundling rules to determine how they will impact taxability. For example, in the preceding dating illustration, if the automated search function and the human assessment were sold for one non-itemized price, and it was determined that the functions were distinct and identifiable, and one function was not essential to the other, a state bundling rule might unbundle the transaction.

The Streamlined Sales Tax Agreement Library of Definitions defines a “bundled transaction” as “the retail sale of two or more products, except real property and

services to real property, where (1) the products are otherwise distinct and identifiable, and (2) the products are sold for one non-itemized price.” Because the definition refers to “products,” the general definition should be applicable to “automated digital products.” Section 330 of the Agreement provides that member states “are not restricted in their tax treatment of bundled transactions except as otherwise provided in the Agreement.”

Part C of the Streamlined definition of “bundled transaction” could be problematic because it refers to “tangible personal property” and “services,” with the term “services” being undefined in the Agreement. An “automated digital product” is a separate classification that is not dependent upon the product being tangible personal property or a service. However, it may be assumed that an “automated digital product” is either tangible personal property or a service, such that Part C applies.

The exemption for automated digital products that will be used predominantly for a trade or business should reduce sourcing difficulties arising from commercial transactions that involve multiple business users at multiple locations. However, depending upon the state, sourcing may need to be clarified or specified. The general sourcing rules in section 309 of the Streamlined Sales Tax Agreement should be sufficient because the sourcing rules apply to “all sales regardless of the characterization of a product as tangible personal property, a digital good, or a service.”