

Synopsis of 2022 Amendments to the Uniform Commercial Code – Emerging Technologies

The Uniform Commercial Code (UCC) is a set of rules to govern commercial transactions. For over sixty years the UCC has worked to facilitate interstate commerce because it has been adopted in nearly identical form by every U.S. jurisdiction. As a result, it does not matter if the parties to a transaction are in different states – the law governing the transaction is substantially the same.

The UCC is updated periodically to keep pace with legal and technological developments. The 2022 amendments ensure that the UCC continues to facilitate commercial activity well into the future by implementing the following updates:

- **Digital Assets.** New Article 12 provides rules for transactions involving certain new types of property, including cryptocurrency and non-fungible tokens (NFTs). Under the UCC, these intangible assets are called “controllable electronic records,” or “CERs.” To ensure that the UCC remains relevant, CERs are defined functionally to include not only assets created using today’s distributed ledger or “blockchain” technology, but also any assets that may function similarly using future technologies.
- **Tangible and Electronic Money.** “Money” is defined under the UCC as a medium of exchange authorized by a domestic or foreign government and was presumed under old UCC rules to exist only in tangible form. Recently, several countries created virtual currencies to supplement traditional forms of money, and at least two countries have adopted the private virtual currency Bitcoin as an alternate form of legal tender. The amendments clarify that governmentally created forms of money may be either tangible or electronic and that private virtual currencies, like Bitcoin, while they may be CERs, are not “money” for purposes of the old UCC rules.
- **Chattel Paper.** “Chattel paper” is a dual-purpose document containing both a monetary obligation and a security interest in goods, like the contract for an automobile loan. The 2022 amendments modify terminology to make it more consistent with other UCC rules.
- **Hybrid Transactions.** Articles 2 and 2A of the UCC apply to the sale and lease of goods, respectively, and not to contracts for services. But the line between these categories has blurred and some courts have struggled to apply the proper law. New rules for hybrid transactions will clarify which law applies.
- **Negotiable Instruments.** Changes to Article 3 clarify the rules for checks and promissory notes and now account for remote deposit via transmission of a photograph of a check.
- **Terminology.** Various UCC provisions are amended to permit the use of electronic documents and signatures.
- **Transition rules.** Most provisions of the UCC amendments will be effective on the effective date in the enacting legislation. However, there will be a grace period to implement other rules that could implicate pre-existing loan agreements during which the parties can ensure that their respective interests remain protected.



A Summary of the 2022 Amendments to the Uniform Commercial Code

July 21, 2022

Introduction

The 2022 amendments to the Uniform Commercial Code (“UCC”) address a limited set of transactions largely involving emerging technologies, such as virtual (non-fiat) currencies, distributed ledger technologies, and, to a limited extent, artificial intelligence. The amendments span most of the Articles of the UCC and add a new Article addressing, in part, certain digital assets.

Background

During a period beginning in 2019, a committee appointed by the American Law Institute and the Uniform Law Commission, the sponsoring organizations of the UCC, considered and formulated amendments to the UCC to address emerging technological developments. The committee included and worked with both lawyers experienced in UCC matters and lawyers whose practices concentrate on these technological developments. The work of the committee has benefitted enormously from the contributions of American Bar Association advisors and approximately 350 observers from academia, trade groups, government agencies, law firms, private technology companies, and foreign participants from multinational law reform organizations or who are active in technology-related law reform efforts in their own countries.

The sponsoring organizations have now approved the amendments. The amendments are being offered for enactment by the states.

The following is a high-level summary of the amendments.

Executive Summary

The amendments respond to market concerns about the lack of definitive commercial law rules for transactions involving digital assets, especially relating to (a) negotiability for virtual (non-fiat) currencies, (b) certain electronic payment rights, (c) secured lending against virtual (non-fiat) currencies, and (d) security interests in electronic (fiat) money, such as central bank digital currencies. The amendments also address other technological developments affecting electronic chattel paper, negotiable instruments, payment systems, electronic documents of title, and sales and leases of goods. In particular, the amendments clarify the scope of Articles 2 and 2A when transactions combine the sale or lease of goods with other matters, a topic of importance in transactions affected by emerging technologies. The amendments contain, as well,

some miscellaneous revisions unrelated to technological developments but providing needed clarifications of provisions of the UCC.

The amendments address only state commercial law rules. They do not address the federal or state regulation or taxation of digital assets or money transmitter or anti-money laundering laws. The amendments defer to law outside of the UCC to answer many questions concerning digital assets.

I. DIGITAL ASSETS

General

The amendments:

- Concern a class of digital assets – defined as “controllable electronic records” (“CERs”) – which include certain virtual (non-fiat) currencies, non-fungible tokens, and digital assets in which specified payment rights are embedded. The amendments provide for a CER to be in effect negotiable, *i.e.*, capable of being transferred in such a way as to cut off competing property claims (including security interests) to the CER (a “take-free” rule similar to the UCC rule for securities).
- The amendments also provide for a security interest in a CER to be perfected by “control” (or by filing a financing statement) and for a security interest perfected by “control” to have priority over a security interest in the CER perfected only by the filing of a financing statement.
- There are also amendments to address security interests in electronic (fiat) money (that is, a virtual currency adopted by a government as a medium of exchange, if the virtual currency did not exist prior to the adoption).

Definition of “Controllable Electronic Record”

A “controllable electronic record” is a record of information in electronic form that is susceptible to “control.” For a person to have “control” of a CER, the person must have:

- The power to enjoy “substantially all the benefit” of the CER,
- The exclusive power to prevent others from enjoying “substantially all the benefit” of the CER, *and*
- The exclusive power to transfer control or to cause another person to obtain control of the CER.

Moreover, the person must be able readily to identify itself to a third party as the person having these powers. Identification can be made other than by name, such as by use of a cryptographic key or account number. The exclusivity requirement is satisfied in most instances even if there is a sharing of these powers through a multi-signature (“multi-sig”) or similar arrangement or if changes occur automatically as part of the protocol built into the system in which the CER is recorded.

One example of a CER is a virtual (non-fiat) currency. If a person holds an electronic “wallet” that contains a virtual currency, the person has control of the

virtual currency if (a) the person may benefit from the use of the virtual currency as a medium of exchange by spending the virtual currency or exchanging the virtual currency for another virtual currency, (b) the person has the exclusive power to prevent others from doing so, and (c) the person has the exclusive power to transfer control of the virtual currency to another person.

In addition, a person may obtain control of a CER through another person, as the following example illustrates.

The person described in the example above (A) holding an electronic wallet that contains a virtual currency has control of the virtual currency. A acknowledges that A holds the virtual currency for another person (B). B also has control of the virtual currency (as does A).

For purposes of determining whether a person has control of a CER, there is a rebuttable presumption that the person's power to prevent others from enjoying "substantially all the benefit" of the CER and to transfer control of the CER is exclusive. In that way these powers must be found to be exclusive unless evidence to the contrary is provided.

If an electronic record is not susceptible of control, it is not a CER and is outside the scope of Article 12 (as well as the provisions of Article 9 that apply to CERs). In addition, the definition of a CER excludes certain digital assets that might otherwise fall within the definition of that term. These assets are excluded because commercial law rules already exist and generally work well for these assets. They include electronic chattel paper, electronic documents, investment property, transferable records under the federal E-SIGN law or the Uniform Electronic Transactions Act ("UETA"), deposit accounts, and electronic money. Nothing in the amendments, for example, disturbs transacting parties' current practices of using transferable records under E-SIGN and UETA. Nor do the amendments affect transacting parties' ability, in effect, to "opt-in" to Article 8 of the UCC by arranging for a digital asset to be held by a securities intermediary as a financial asset credited to a securities account. Electronic money is treated separately under the amendments, as described below.

Rights of a Transferee of a Controllable Electronic Record

Article 12 governs certain transfers of CERs. If a CER is purchased (a term defined in the UCC to encompass only voluntary transactions, including obtaining a security interest in the CER), the purchaser acquires an interest in all rights in the CER that the transferor had, or had the power to transfer. In addition, if the purchaser is a "qualifying purchaser," the purchaser benefits from the "take-free" rule, *i.e.*, the purchaser acquires its interest in the CER free from competing property claims to the CER. A "qualifying purchaser" is a purchaser that obtains control of a CER for value, in good faith, and without notice of a property claim to the CER. As with negotiable instruments and investment property, the filing of a financing statement in and of itself is not notice of a property claim to the CER.

Consider the example of a person in control of a virtual (non-fiat) currency: If the person transfers control to a purchaser (or causes the purchaser to obtain control),

the transferee obtains its interest in whatever rights in the virtual currency that the transferor had or had the power to transfer. If the transferee is a “qualifying purchaser” of the virtual currency, the transferee also benefits from the “take-free” rule.

Tethering and Certain Payment Rights

With one important exception described in the following paragraph, law other than Article 12 determines what rights are evidenced by the CER, and whether a “take-free” rule applies to those other rights (in addition to the CER itself) upon a transfer of the CER. For example, the amendments do not address the effect of copyright law as it relates to someone in control of a non-fungible token “tethered” to intellectual property. Other law determines the effect of that “tethering.” Similarly, if a CER purports to evidence an interest in real estate, whether the “take-free” rule applies to the interest in the real estate upon a transfer of control of the CER must be determined under other law, presumably the applicable real estate law.

An important exception to this deference to other law applies when an “account” or “payment intangible” (as those terms are already defined in Article 9 of the UCC) is evidenced by a CER, creating a “controllable account” or “controllable payment intangible” if the person obligated on the account or payment intangible has agreed to pay the person in control of the CER. If control of a CER that evidences a controllable account or controllable payment intangible is transferred, the controllable account or controllable payment intangible travels with the CER, and the transferee, if a qualifying purchaser, benefits from the same “take-free” rule that applies to the CER. The effect is to create what is functionally an electronic instrument even though the payment rights continue to be classified as a “controllable account” or “controllable payment intangible.” If the terms of the account or payment intangible also provide that the account debtor will not assert claims or defenses against the transferee of the CER (as, and to the extent, permitted by UCC § 9-403 and subject to consumer laws), the effect is to create the substantial electronic equivalent of a *negotiable* instrument. These provisions respond to market concerns in the trade finance area that commercial law rules are currently insufficient for promissory notes in electronic form and electronic bills of exchange.

Consider a buyer of goods who delivers to the buyer’s seller a promissory note in payment for the goods. A promissory note (as defined in Article 9) must be a writing. If certain conditions are met, the note would qualify as a negotiable instrument under Article 3 of the UCC, in which case a holder of the promissory note could be a holder in due course of the negotiable instrument. But, if the promise to pay is in electronic form and even if those additional conditions are met, Article 3 does not apply because a negotiable instrument must be a writing. If the promise to pay does not qualify as a “transferable record” under UETA or E-SIGN, the rights of a transferee of the promise to pay are governed under current law by normal contract rules and some rules under UCC Article 9. Under the amendments, however, if the promise to pay is evidenced by a CER and the person obligated on the account or payment intangible has agreed to pay the person in control of the CER, the “take-free” rule applies to a qualifying purchaser of the promise to pay. If the buyer also agreed not to assert claims or defenses against a transferee of the promise to pay, the electronic promise to pay, subject to

applicable consumer laws, has negotiability characteristics similar to those of a negotiable instrument under Article 3.

Secured Lending

The provisions applicable to purchasers of CERs are coordinated with corresponding additional and existing provisions of Article 9 to govern security interests in CERs that are designed to preserve the availability of existing transaction patterns. Under the amendments, there is no need to change existing collateral descriptions in security agreements or existing collateral indications on financing statements. For purposes of Article 9 terminology, a CER is a “general intangible,” a controllable account is an “account,” and a controllable payment intangible is a “payment intangible.” The normal rules for attachment will continue to apply to security interests in CERs, and a security interest in a CER, a controllable account, or a controllable payment intangible may still be perfected by the filing of a financing statement.

However, under the amendments, a security interest in a CER, a controllable account, or a controllable payment intangible also may be perfected by the secured party obtaining “control” of the CER. A security interest in a CER, a controllable account, or a controllable payment intangible perfected by “control” has priority over a security interest in the CER, controllable account, or controllable payment intangible perfected only by filing (or by another method other than control). Control is defined as described above.

Another example may be helpful. SP-1 lends funds to Debtor, obtains a security interest in Debtor’s accounts, payment intangibles, and other general intangibles, and perfects the security interest only by the filing of a financing statement. SP-2 later lends to Debtor, obtains a security interest in a CER that evidences what is functionally an electronic promissory note payable to the person in control of the CER (a controllable payment intangible or controllable account), and files a financing statement to perfect its security interest. SP-1’s security interest has priority under the first to file or perfect priority rule of Article 9. If SP-2 obtains control of the CER (which evidences the controllable payment tangible or controllable account), SP-2’s security interest in the electronic promise to pay is senior to SP-1’s security interest in the electronic promise to pay.

The transition rules for the 2022 amendments provide for a period during which parties to a transaction will retain their priorities existing on the effective date of a state’s enactment of the amendments. Parties will have an opportunity to adjust their transaction before the new rule establishing priority for a party that obtains control takes effect. See Section VIII below on “Transition.”

Account Debtor Discharge

Similar to current Article 9 for accounts and payment intangibles generally, the obligor on an account or payment intangible (an account debtor) receives a discharge by paying the person formerly in control until the account debtor receives a notification signed (which, under the amendments, may be done in a writing or electronically) by the debtor (the person assigning the account or payment intangible) or its secured party (which may include a buyer of the account or payment intangible) indicating that the

secured party has a security interest in the controllable account or controllable payment intangible and a payment instruction (often referred to as a “deflection notification”) to pay the secured party as the person now in control. Following receipt of the deflection notification, the account debtor is discharged only by paying the secured party and is not discharged by paying the debtor.

Also, similar to current Article 9, the account debtor may ask for reasonable proof that the secured party is the person in control before paying the secured party. However, unlike under current Article 9, for a controllable account or controllable payment intangible the method of providing that reasonable proof must have been agreed to by the account debtor, presumably as part of the CER when it was created. Absent there being an agreed method of providing reasonable proof, the deflection notification is not effective, and the account debtor is able to obtain a discharge by continuing to pay the debtor.

As a practical matter, few account debtors question a deflection notification or ask for reasonable proof. However, if an account debtor does ask for reasonable proof, the relevant parties have the flexibility to develop for market acceptance methods for providing the reasonable proof.

Choice of Law

The amendments include substantially identical choice-of-law rules for the Article 12 take-free rules for transferees of CERs and the Article 9 rules for perfection by control and priority of a security interest in a CER, controllable account, or controllable payment intangible perfected by control. Having the same rules promotes consistent results and predictability.

The amendments generally follow the choice-of-law approach taken in Articles 8 and 9 for financial assets credited to a securities account at a securities intermediary. The state or nation whose law applies to take-free rules in connection with transfers of CERs and the perfection, effect of perfection or non-perfection, and priority of a security interest in a CER perfected by control is determined by the law where the CER is considered by the amendments to be “located”—*i.e.*, *the CER’s* jurisdiction. For a CER that expressly provides its jurisdiction, perfection, other than by the filing of a financing statement, and priority are governed by the law of that jurisdiction. Otherwise, the CER’s jurisdiction is the jurisdiction whose law governs the system in which the CER is recorded. If no express provision is made in the CER or the system, the CER is located in the District of Columbia. If the District of Columbia has not enacted the amendments, the substantive law rules of the Official Text of the amendments apply. In the case of perfection of a security interest by the filing of a financing statement, the normal debtor location rules apply for perfection (but not priority).

II. ELECTRONIC MONEY

The current definition of “money” in the UCC is sufficient to include a virtual (fiat) currency authorized or adopted by a government, whether token-based or deposit account-based. But that definition also may include a medium of exchange in an electronic record (such as Bitcoin) that existed and operated as a medium of exchange before it was authorized or adopted as a medium of exchange by a government. The

amendments, however, exclude from “money” such an electronic record that existed and operated as a medium of exchange before it was authorized or adopted as a medium of exchange. Nevertheless, such a medium of exchange evidenced by an electronic record so excluded from the definition of money could still qualify as a CER.

Under current Article 9 a security interest in money can be perfected only by possession, which means actual physical possession. However, intangible money is not susceptible to possession. But, if electronic money (defined in the amendments to exclude money that cannot be subject to control) is not credited to a deposit account, a security interest in the electronic money may be perfected only by control. The amendments also provide that, if intangible money is credited to a deposit account (even one at a central bank), the intangible money is not “money” for purposes of Article 9 and instead the normal deposit account perfection rules apply. UCC § 9-332 is amended so that a transferee of money, whether tangible or electronic, can take free of a security interest in the money. In other circumstances, any “take-free” rule is determined by the law governing the electronic money.

III. CHATTEL PAPER

The amendments make several changes to the treatment of chattel paper under the UCC:

- The definition of the term “chattel paper” is modified to refer to a right to payment evidenced by the relevant records rather than to the records themselves. This modification aligns the definition of chattel paper with the treatment of a right to payment consisting of a controllable account or controllable payment intangible evidenced by a CER, which distinguishes between the payment right and the CER itself.
- The definition of the term “chattel paper” is further modified so that a right to payment from a “hybrid” lease transaction—a single transaction consisting of a lease of goods and the provision of other property or services—is treated as chattel paper if the acquisition of the right to the use and possession of the goods is the predominant purpose of the transaction
- The definition of “control” of chattel paper in electronic form is expanded to align with the definition of control for a CER. As a result, instead of a “single” authoritative copy of the chattel paper records being required to fit within the existing “safe harbor” for control of chattel paper in electronic form, a distinction is made between “authoritative” copies and “non-authoritative” copies. Control is achieved when a person has control of all “authoritative” copies. At the same time, in order not to upset settled transactions completed under the existing definition of “control” for electronic chattel paper, the “safe harbor” in the existing definition is “grandfathered” under the amendments.
- Because many chattel paper transactions consist of both chattel paper in tangible form (i.e., evidenced by a writing) and chattel paper in electronic form and that chattel paper in tangible form is often converted to chattel paper in electronic form and vice-versa, the amendments generally eliminate the distinction between chattel paper in tangible form and chattel paper in electronic form and the defined terms “electronic chattel paper” and “tangible chattel paper” have been removed. A security interest in chattel paper is perfected, and non-temporal “superpriority” is

achieved, by possession and control of the chattel paper. Possession is applicable to the extent that the authoritative copies of the chattel paper are tangible; control is applicable to the extent that the authoritative copies of the chattel paper are electronic.

- The choice-of-law rule for the perfection of a security interest by possession of chattel paper evidenced wholly by a tangible record, the effect of perfection and non-perfection of a security interest in the chattel paper, and the priority of a security interest in the chattel paper are determined by the law of the jurisdiction in which the tangible record evidencing the chattel paper is located. Both perfection (other than by filing) and priority for chattel paper that does not consist wholly of chattel paper in tangible form (*i.e.*, chattel paper evidenced only by an electronic record or evidenced by both electronic and tangible records) is governed by the law of the jurisdiction where the chattel paper is considered to be located—*i.e.*, the “chattel paper’s jurisdiction.” If chattel paper in electronic form expressly provides its jurisdiction, perfection and priority are governed by the law of that jurisdiction. Otherwise, the governing law is that whose law governs the system in which the chattel paper or electronic record thereof is recorded. If no governing law is stated in the system, perfection and priority is governed by the law of the debtor’s location. For all chattel paper, the normal debtor location rules apply to perfection by the filing of a financing statement.

IV. NEGOTIABLE INSTRUMENTS

The amendments contain several changes to Article 3 of the UCC addressing negotiable instruments. First, the amendments make clear that a choice-of-law or choice-of-forum clause contained in the instrument does not affect the negotiability of the instrument. Second, the amendments provide that, if agreed by the payee, an item may be issued by a maker or drawer by transmission of an image of the item and information describing the item if the image and information permits the depository bank to process the item as an electronic check under Federal Reserve Board Regulation CC. This change addresses the practice of some makers or drawers of sending an image of a check to the payee. Third, the amendments provide that a check destroyed following a remote deposit of the instrument does not discharge the obligation evidenced by the instrument. The effect of this change is to keep the obligation alive if for some technological or other reason the remote deposit was not effective but the check had been destroyed by the payee on the assumption that the remote deposit was effective.

The amendments do not provide for an electronic negotiable instrument under Article 3.

V. PAYMENT SYSTEMS

The amendments provide some clarification of what constitutes a security procedure for a funds transfer under Article 4A of the UCC. Symbols, sounds, and biometrics may constitute a security procedure. Merely verifying an email address, IP address, or telephone phone number is not a security procedure.

VI. SALES AND LEASES OF GOODS

As a result of emerging technologies, “hybrid transactions” – transactions that involve both a sale or lease of goods and a sale, lease, or license of other property or the provision of services – are increasingly common. The amendments provide that, in the case of a hybrid transaction in which the sale or lease of goods aspect predominates, Article 2 or 2A applies. If the goods aspects predominate, a court may, in appropriate circumstances, apply other law to the aspects of the transaction which do not relate to the sale or lease of goods. When the goods aspects do not predominate, the provisions of Article 2 or 2A which relate primarily to the goods aspects of the transaction, and not to the transaction as a whole, apply to those aspects.

Because most requirements that language be presented in a manner that is “conspicuous” relate to sales and leases of goods, the meaning of that term is quite important for Articles 2 and 2A. Yet, the current definition of that term is inadequate for contracts entered into in an electronic environment. See the discussion of Article 1 below for a summary of how the definition of the term has been changed.

VII. MISCELLANEOUS AMENDMENTS

“Writing” requirements

A number of “writing” requirements in the UCC are changed to “record” requirements where the effect is to facilitate electronic commerce. The requirements for an “instrument” in Articles 3 and 9 to be in a writing is not changed. There are corresponding changes to the definition of “signed”, discussed immediately below.

Article 1

The definition of “signed” is expanded to apply not only to a signature in a writing, as in the existing definition, but also to an electronic signature. This definition applies throughout the UCC where an electronic record is permitted.

The examples of what is “conspicuous” in the “black letter” definition of the term are deleted. The examples were not considered useful for electronic transactions and are even of questionable relevance in some cases for paper-based transactions. The Official Comments further explain the term including discussing the examples removed from the “black letter” text and providing more appropriate guidelines for electronic transactions.

A new sentence is added to the definition of “person” to provide that a protected series of a series organization (such as a limited liability company that established protected series) is a person under the UCC. The protected series is a person separate from the series organization or from another protected series of the series organization.

Article 5

The amendments clarify that, if a letter of credit issued by a bank states its governing law, a branch of a bank is still considered as a separate bank for purposes of UCC Article 5.

Article 7

The definition of “control” in UCC Article 7 is expanded to be similar to the definition of control for electronic chattel paper. As with the chattel paper definition of “control,” the existing “safe harbor” for control of an electronic document of title is “grandfathered.”

Article 9

The word “authenticate” is replaced by the word “sign,” with correlative changes, because the new definition of “sign” in UCC Article 1 (discussed above) eliminates the need for the separate term “authenticate” in UCC Article 9.

The amendments clarify that under existing law (a) an “assignor” is a person who grants a security interest to secure an obligation or a seller of accounts, chattel paper, payment intangibles, or promissory notes, and (b) an “assignee” is a person in whose favor a security interest is granted to secure an obligation or a buyer of accounts, chattel paper, payment intangibles, or promissory notes. The effect is to codify Official Comment 26 to Section 9-102 consistent with Permanent Editorial Board for the Uniform Commercial Code Commentary No. 21.

The amendments clarify that a security interest in a commercial tort claim as proceeds of original collateral properly described in a security agreement may attach to the commercial tort claim or its proceeds even if the commercial tort claim was not described in the security agreement. The amendments also clarify that a security interest may attach under an after-acquired property clause to proceeds of a commercial tort claim even if the security agreement does not describe or encumber the commercial tort claim.

VIII. TRANSITION

Transition rules for the proposed amendments are designed to protect the expectations of parties to transactions entered into before a state’s effective date of the amendments and to provide for sufficient time for parties to plan transactions entered into after the effective date.

The transition rules do not contain a uniform effective date for the amendments, because some states appear ready to enact the amendments as early as possible. However, the rules do contain a uniform “adjustment date” of at least one year from the effective date. The adjustment date gives transacting parties a grace period to preserve priorities already established on the effective date if the amendments would otherwise affect those priorities. The following examples illustrate some significant aspects of the transition rules.

Pre-effective date SP-1 lends to Debtor, obtains a security interest in Debtor’s accounts, payment intangibles, and other general intangibles, and perfects the security interest by the filing of a financing statement. SP-2 later, but still pre-effective date, lends to Debtor, obtains a security interest in a CER, which evidences what is functionally an electronic promissory note payable to the person in control (a controllable payment intangible or controllable account), and obtains what would be control of the CER (which evidences the controllable payment tangible or controllable account) under the amendments.

Pre-effective date SP-2's security interest in the electronic promise to pay is unperfected and junior to SP-1's security interest in the electronic promise to pay because perfection by control was not a method of perfection under former Article 9. Under the amendments perfection by control is a method of perfection, and a security interest perfected by control is senior to a security interest perfected by filing.. But for the adjustment date, SP-2's security interest in the electronic promise to pay would be senior to SP-1's security interest on the effective date in the CER's jurisdiction. However, this reversal of priorities established pre-effective date and caused by the amendments is postponed until the adjustment date in order to permit SP-1 time to address any concern over the loss of its senior priority in the electronic promise to pay.

IX. ADDITIONAL INFORMATION

This summary is a very general overview of the amendments. The text of the amendments and additional information are available on the Uniform Law Commission's web site, www.uniformlaws.org.



Overview of 2022 Amendments to the Uniform Commercial Code – Emerging Technologies

The Uniform Commercial Code (UCC) is a set of rules to govern commercial transactions. For over sixty years the UCC has worked to facilitate commerce throughout the United States because it has been adopted in nearly identical form by every U.S. jurisdiction. As a result, it does not matter if the parties to a transaction are in different states – the law governing the transaction is substantially the same.

The UCC has been so widely accepted because its provisions are sensible and consistent with most people’s expectations. For example, if a merchant agreed to sell the same television to two different buyers, obviously only one of them could take delivery of the television and use it. Under the UCC, the merchant would be required to either provide an equally good television to the second buyer or to refund the purchase price. This is a simple example, but illustrative. The UCC contains many such rules to provide ready answers when something goes wrong with a transaction.

Most UCC rules, when third party rights are not involved, are default rules. The parties to any particular transaction can agree to different terms in a contract and their agreement will be enforceable. But if they have not agreed otherwise the UCC default rules will apply. In this way, the UCC provides legal certainty, which in turn gives many millions of Americans the confidence to conduct business with strangers. Because this uniform set of rules is in place, strong commercial markets have developed and thrived.

The UCC is updated periodically to keep pace with legal and technological developments. The 2022 amendments will ensure that the UCC continues to facilitate commercial activity well into the future by implementing the following updates:

- **Digital Assets.** A new Article 12 provides rules for transactions involving certain new types of digital assets, including cryptocurrency and non-fungible tokens (NFTs). Under the UCC, these intangible assets are called “controllable electronic records,” or “CERs.” To ensure that the UCC remains relevant, CERs are defined to include not only assets created using today’s distributed ledger or “blockchain” technology, but also any assets that may function similarly using future technologies.
 - **Control of Digital Assets.** Section 12-105 introduces the concept of “control” as it applies to intangible property such as cryptocurrency. Control of an electronic record is roughly analogous to possession of a tangible asset – the person with control has the power to “spend” the intangible asset by transferring it to another person in exchange for goods or services. The person with control can also prevent anyone else from using the property. The person with control can be anonymous, but must be positively identifiable in some manner, such as through the use of a cryptographic key.
 - **Security Interests in Digital Assets.** Amendments to Article 9 will facilitate the use of digital assets as collateral for loans. Under the prior version of Article 9, there was no effective way

for a lender to perfect a security interest in digital assets except by filing a financing statement, and no way to ensure priority of the security interest without obtaining a release or subordination from all other secured parties, if they are even disclosed. The amended Article 9 will provide that a lender with control of digital assets has a perfected security interest with priority over the interests of any other lenders who do not have control.

- **Tethered Assets.** Some digital assets may not have intrinsic value, but rather represent a right to payment. A simple example would be an electronic promissory note with terms stating the borrower agrees to pay the lender a fixed monthly payment for a period of time. When the promissory note was executed on paper, the paper itself could be sold by the original lender to another party who bought not just the paper itself, but the right to receive future payments from the borrower. The right to payment was “tethered” to the paper. The 2022 amendments will provide similar rules for “controllable accounts” and “controllable payment intangibles,” which are simply digital versions of a tethered asset, e.g. a promissory note in electronic form rather than in a writing.
- **Take-Free Rules.** The UCC includes rules to protect innocent parties who receive digital assets subject to competing property claims. For example, imagine a bank robber who uses stolen cash to purchase goods at a store. If the store accepted the cash in exchange for valuable goods without knowing that the cash was stolen, the store is not liable for the bank’s loss even if the cash received is later traced to the robbery. The robber remains liable for the amount stolen. Similarly, new UCC provisions will protect innocent parties who accept in good faith digital assets in exchange for value without knowledge of any other property claim to the assets.
- **Governing Law.** Because digital assets have no physical location, conflict of laws questions may arise. The UCC amendments will allow the parties to a transaction involving digital assets to choose the law that applies to their transaction for commercial law purposes and incorporate the choice into their CER or the system in which the CER is recorded. If the parties do not choose a governing law in the CER or system, the law of the District of Columbia will apply.
- **Tangible and Electronic Money.** “Money” is defined under the UCC as a medium of exchange authorized by a domestic or foreign government and was presumed under many UCC rules to exist only in tangible form. Recently, some countries’ central banks have proposed creating virtual currencies to supplement or replace traditional forms of money, and at least two countries have adopted the virtual currency Bitcoin as an alternate form of legal tender. An amendment to the Article 1 definition of money clarifies that governmentally created forms of money may be tangible or electronic and that pre-existing virtual currencies, like Bitcoin, while they may be CERs, are not “money” for purposes of the UCC. New amendments in Article 9 provide that a security interest in “electronic money,” i.e. virtual currency created by a government’s central bank, like a security interest in a CER can only be perfected through control.

- **Chattel Paper.** “Chattel paper” is defined under the former Article 9 as a record containing both a monetary obligation and a security interest in goods, e.g. the documents governing an automobile loan. The 2022 amendments modify this definition to refer to the right to payment evidenced by the record, rather than to the record itself. This makes the rules for chattel paper more consistent with the new rules for CERs. Similarly, the rule governing control of electronic chattel paper is amended for consistency with the rule governing control of CERs.
- **Hybrid Transactions.** Articles 2 and 2A of the UCC apply to the sale and lease of goods, respectively, and not to contracts for services. The line between these categories has blurred with the emergence of transactions involving both the sale or lease of goods and the provision of other property or services. As a result, a new rule is needed for these hybrid transactions. The UCC amendments provide that, absent the parties’ agreement otherwise, the UCC rules will apply to a hybrid transaction if the sale/lease of goods is the predominant purpose of the transaction. If the sale of services or provision of other property predominates, the UCC rules will apply only to aspects of the transaction that involve the sale or lease of goods. Whether or not the lease of goods aspects of the transaction predominate, the finance lease provisions of Article 2A will apply to those aspects of the transaction.
- **Negotiable Instruments.** Changes to Article 3 clarify that a choice-of-law or choice-of-forum clause included in an instrument does not affect the negotiability of the instrument, and that an image of a negotiable instrument (i.e., photos of the front and back of a check) may be substituted for the actual instrument in accordance with federal banking regulations.
- **Terminology.** Various UCC provisions are amended to replace obsolete terms that applied only to transactions on paper. For example, the term “sign” is redefined to include electronic signatures, the term “record” is substituted for “writing” to encompass electronic documents, and the term “conspicuous” is redefined to apply more broadly to the terms of both paper and electronic agreements.
- **Transition rules.** The UCC amendments will be effective on the effective date in the enacting legislation. However, to protect any lenders who hold a security interest in digital assets that were perfected under the prior rules, there will be a transition period during which the lender’s priority established on the effective date will be maintained. This provides a grace period during which the parties to a pre-existing loan agreement can renegotiate terms as necessary and comply with provisions of the new law to ensure that their respective interests remain protected.