



**Interpretive Letter 1174
January 2021**

**OCC Chief Counsel's Interpretation on National Bank and Federal Savings Association
Authority to Use Independent Node Verification Networks and Stablecoins for Payment
Activities**

January 4, 2021

I. Introduction and Summary Conclusion

This letter addresses the legal permissibility of certain payment-related activities that involve the use of new technologies, including the use of independent node verification networks (INVNs or networks) and stablecoins, to engage in and facilitate payment activities. National banks and Federal savings associations (collectively referred to as “banks”) may use new technologies, including INVNs and related stablecoins, to perform bank-permissible functions, such as payment activities.

An INVN consists of a shared electronic database where copies of the same information are stored on multiple computers. One common form of an INVN is a distributed ledger.¹ Cryptocurrency transactions are recorded on these ledgers.² An INVN's participants, known as nodes, typically validate transactions, store transaction history, and broadcast data to other nodes.³

¹ See OCC Interpretive Letter 1170 (Jul. 22, 2020) (IL 1170) (describing distributed ledger technology as a shared electronic database where copies of the same information are stored on multiple computers. This shared database functions as both a mechanism to prevent tampering and as a way to add new information to the database. Information will not be added to the distributed ledger until consensus is reached that the information is valid. INVNs represent one of the key technologies that support the novel exchange mechanism underlying cryptocurrency. The other key technology is advanced cryptography.).

² The OCC described many features of cryptocurrency in IL 1170. In addition, the OCC recently addressed the permissibility of a national bank holding reserves for stablecoins that are backed by fiat currency on at least a 1:1 basis in situations where there is a hosted wallet. See OCC Interpretive Letter 1172 (Sept. 21, 2020) (IL 1172).

³ Nodes are generally either full nodes or light nodes. Full nodes verify transactions, maintain consensus between other nodes, and contain a full copy of the ledger's entire history. Light nodes generally consist of wallets that download only the headers of blocks to validate their authenticity and save hard drive space for users by not storing a full copy of the ledger's history. One example of a light node may be a customer's digital wallet on the customer's mobile phone. See, e.g., Josh Evans, Blockchain Nodes: An In-Depth Guide, Nodes.com (Sept. 22, 2020), available at <https://nodes.com/>; Blockchain: What are nodes and masternodes?, Medium.com (Sept. 22, 2020), available at <https://medium.com/coinmonks/blockchain-what-is-a-node-or-masternode-and-what-does-it-do-4d9a4200938f>. A bank may want to serve as a full node on an INVN due to the wider range of capabilities on a full node as compared to a light node, as described above.

A stablecoin is a type of cryptocurrency that is designed to have a stable value as compared with other types of cryptocurrency.⁴ Some stablecoins are backed by a fiat currency, such as the U.S. dollar. Fiat-backed stablecoins can typically be exchanged for the underlying fiat currency, where one unit of the stablecoin can be exchanged for one unit of the underlying fiat currency.⁵ In this regard, the stablecoin represents a mechanism for storing, transferring, transmitting, and exchanging the underlying fiat currency value, all of which are key to facilitate payment activities. One example of stablecoin as a mechanism to facilitate payment activities is the payment of remittances, which often involve cross-border transfers of money.⁶

Courts and the OCC have long recognized that the primary role of banks is to act as financial intermediaries, facilitating the flow of money and credit among different parts of the economy.⁷ “The very object of banking is to aid the operation of the laws of commerce by serving as a channel for carrying money from place to place, as the rise and fall of supply and demand require, and it may be done by rediscounting the bank’s paper or by some other form of borrowing.”⁸ The precedents and history⁹ reflect that a bank’s role as financial intermediary can

⁴ See IL 1172. See also *President’s Working Grp. on Fin. Markets Releases Statement on Key Regulatory & Supervisory Issues Relevant to Certain Stablecoins*, Treas. SM-1223 (Dec. 23, 2020) (providing an initial assessment of regulatory and supervisory considerations for participants in certain stablecoin arrangements and clarifying expectations for the retail payment application of stablecoins), available at <https://home.treasury.gov/news/press-releases/sm1223>.

⁵ IL 1172 noted that other types of cryptocurrencies described as “stablecoins” may be more complex, backed by commodities, cryptocurrencies, or other assets but with values that are pegged to a fiat currency or managed by algorithm.

⁶ Facilitating cross-border payments in stablecoin may improve the speed and cost of transferring funds anywhere in the world; traditional remittances often come with high fees and may take several days to complete. See Hugo Renaudin, *Driven by Financial Institutions, Stablecoin Acceptance Turns a Corner*, Cointelegraph.com (June 14, 2020), available at <https://cointelegraph.com/news/driven-by-financial-institutions-stablecoin-acceptance-turns-a-corner>.

⁷ See, e.g., OCC Interpretive Letter 1102 (Nov. 2008) (IL 1102); see also *NationsBank of North Carolina, N.A. v. Variable Life Annuity Co.*, 513 U.S. 251, 252 (1995) (“VALIC”); OCC Interpretive Letter 499 (Feb. 12, 1990).

⁸ *Auten v. U.S. Nat’l Bank of New York*, 174 U.S. 125, 143 (1899).

⁹ See IL 1102; OCC Interpretive Letter 892 (Sept. 8, 2000). The OCC’s view of banks as financial intermediaries comports with the historical role of banks in the economy. See Peter Olson, *Regulation’s Role in Bank Changes*, 18 ECON. POL’Y REV. 13, Federal Reserve Bank of New York (2012), available at <https://www.newyorkfed.org/medialibrary/media/research/epr/2012/EPRvol18n2.pdf>. As early as the Roman Empire, banks served as intermediaries that mediated between borrowers and lenders, obviating direct contact between them. These banks dealt with the day to day needs of their clients for cash. See Peter Termin, *Financial Intermediation in the Early Roman Empire*, 64 J. ECON. HIST. 705 (2004). In the 17th century, Dutch merchant banks, such as the Bank of Amsterdam, held deposits and transferred money between accounts; in 18th century England, merchant banks accepted deposits and loaned money to landowners and merchants. *Id.* Besides deposit taking and lending, another crucial component of financial intermediation is connecting participants in the financial system through the processing of payments. As financial intermediaries, banks have processed payments on behalf of their customers for centuries. For example, in ancient Mesopotamia and Egypt, customers would deposit goods (such as grains) in palaces, temples, and private houses that served as banks. Deposit receipts for these goods were transferable and facilitated transactions and payments between customers. See Chao Gu, Fabrizio Mattesini, Cyril Monnet, & Randall Wright, *Banking: A New Monetarist Approach*, 80 REV. ECON. STUD. 636 (2013). During the era of Medici banking in the 15th century, Italian bankers facilitated payments by book transfer on the instruction of oral or written orders. See Raymond de Roover, *The Rise and Decline of the Medici Bank*, Harvard University

take many forms: providing payments transmission services, borrowing from savers and lending to users, and participating in the capital markets. As the recognized intermediaries between other, non-bank participants in the financial markets and the payment systems, banks possess the expertise to facilitate the exchange of payments and securities between, and settle transactions for, parties and to manage their own intermediation position.

Over time, banks' financial intermediation activities have evolved and adapted in response to changing economic conditions and customer needs. Banks have adopted new technologies to carry out bank-permissible activities, including payment activities.¹⁰ The emergence of new technologies to facilitate payments, support financial transactions, and meet the evolving financial needs of the economy has led to a demand for banks to use INVN to carry out their traditional functions. The changing financial needs of the economy are well-illustrated by the increasing demand in the market for faster and more efficient payments through the use of decentralized technologies, such as INVNs, which validate and record financial transactions, including stablecoin transactions.¹¹

Industry participants recognize that using stablecoins to facilitate payments may combine the efficiency and speed of digital currencies with the stability of existing currencies.¹² As discussed below, stablecoins can provide a means of transmitting value denominated in an

Press, at 2 (1963). In medieval times, Venetian bankers accepted commodities on deposit that were used to facilitate transactions, and deposit receipts began circulating in place of cash for payments in early 17th century. See Gu, Mattesini, Monnet, & Wright, supra. During the second half of the 17th century, goldsmith bankers in London operated a system of payments through mutual debt acceptance and interbanker clearing. See Stephen Quinn, Goldsmith-Banking: Mutual Acceptance and Interbanker Clearing in Restoration London, 34 EXPLORATIONS IN ECON. HIS. 411 (1997).

¹⁰ For example, and as discussed below, banks have adopted new technologies in their development and operation of electronic funds transfer systems, real-time settlement systems, and stored value systems. See OCC Interpretive Letter 890 (May 15, 2000) (IL 890); OCC Interpretive Letter 854 (Feb. 25, 1999) (IL 854); OCC Interpretive Letter 1157 (Nov. 12, 2017) (IL 1157); OCC Interpretive Letter 1140 (Jan. 13, 2014) (IL 1140); OCC Conditional Approval Letter 220 (Dec. 2, 1996); OCC Conditional Approval Letter 568 (Dec. 31, 2002); OCC Interpretive Letter 737 (Aug. 19, 1996) (IL 737).

¹¹ See, e.g., Michael del Castillo, Visa Partners with Ethereum Digital-Dollar Startup that Raised \$271 Million (Dec. 2, 2020), available at <https://www.forbes.com/sites/michaeldelcastillo/2020/12/02/visa-partners-with-ethereum-digital-dollar-startup-that-raised-271-million/?sh=30afc9ac4b1f>; Advancing Our Approach to Digital Currency: Visa's Outlook on New Digital Currency Payment Flows (July 22, 2020), available at <https://usa.visa.com/visa-everywhere/blog/bdp/2020/07/21/advancing-our-approach-1595302085970.html>; Helen Partz, Japanese Banking Giant to Issue Its Own Stablecoin in Late 2020, Cointelegraph.com (July 14, 2020), available at <https://cointelegraph.com/news/japanese-banking-giant-mufg-to-issue-its-own-stablecoin-in-h2-2020>; Marie Huillet, Japanese Banking Giant Mizuho to Launch Its Yen-Pegged Stablecoin in March (Feb. 21, 2019), available at <https://cointelegraph.com/news/japanese-banking-giant-mizuho-to-launch-its-yen-pegged-stablecoin-in-march>; Press Release, Wells Fargo & Co., Wells Fargo to Pilot Internal Settlement Service Using Distributed Ledger Technology (Sept. 17, 2019), available at <https://newsroom.wf.com/press-release/innovation-and-technology/wells-fargo-pilot-internal-settlement-service-using>; Press Release, JP Morgan Chase & Co., J.P. Morgan Creates Digital Coin for Payments (Feb. 14, 2019), available at <https://www.jpmorgan.com/global/news/digital-coin-payments>. These examples are descriptive only. This letter expresses no view on the permissibility of, or other considerations related to, the activities described therein.

¹² See, e.g., Advancing Our Approach to Digital Currency: Visa's Outlook on New Digital Currency Payment Flows (July 22, 2020).

existing currency using INVN technology. Stablecoins thus provide a means by which participants in the payment system may avail themselves of the potential advantages associated with INVNs. Billions of dollars' worth of stablecoin trade globally, and demand for stablecoin continues to grow.¹³

As discussed below, INVNs and related stablecoins represent new technological means of carrying out bank-permissible payment activities. We therefore conclude that a bank may validate, store, and record payments transactions by serving as a node on an INVN. Likewise, a bank may use INVNs and related stablecoins to carry out other permissible payment activities. A bank must conduct these activities consistent with applicable law and safe and sound banking practices.

As noted in a recent statement of the President's Working Group on Financial Markets, stablecoin arrangements "should have the capability to obtain and verify the identity of all transacting parties, including for those using unhosted wallets."¹⁴ "The stablecoin arrangement should have appropriate systems, controls, and practices in place to manage these risks, including to safeguard reserve assets. Strong reserve management practices include ensuring a 1:1 reserve ratio and adequate financial resources to absorb losses and meet liquidity needs."¹⁵

II. Discussion

The OCC has recognized that bank-permissible activities may be conducted with new and evolving technologies. Banks may use electronic means or facilities to perform any function, or provide any product or service, as part of an authorized activity.¹⁶ Consistent with this precedent, banks may serve as a node on an INVN and use INVNs and related stablecoins to conduct permissible banking activities, including authorized payment activities.

National banks may engage in payment-related activities as activities within the business of banking.¹⁷ The OCC has found that "[p]ayment system activities (e.g., electronic payments message transmission, electronic payments processing, and payments settlement among members) are clearly within the business of banking and are functionally consistent with the primary role of banks as financial intermediaries."¹⁸ Similarly, FSAs may engage in payment-

¹³ See, e.g., Zack Voell, Stablecoin Supply Breaks \$10B as Traders Demand Dollars Over Bitcoin, Coindesk.com (May 12, 2020) available at <https://www.coindesk.com/stablecoin-supply-breaks-10b-as-traders-demand-dollars-over-bitcoin>; USD Coin, Coinmarketcap.com (last accessed Jan. 4, 2021), available at <https://coinmarketcap.com/currencies/usd-coin>.

¹⁴ *President's Working Grp. on Fin. Markets Releases Statement on Key Regulatory & Supervisory Issues Relevant to Certain Stablecoins*, Treas. SM-1223 (Dec. 23, 2020).

¹⁵ *Id.*

¹⁶ See 12 C.F.R. § 7.5000 *et seq.*; 12 C.F.R. § 155.200.

¹⁷ See, e.g., IL 1157; IL 1140; OCC Interpretive Letter 1014 (Jan. 10, 2005); OCC Interpretive Letter 929 (Feb. 11, 2002); OCC Interpretive Letter 993 (May 16, 1997) (IL 993); IL 737; OCC Conditional Approval Letter 220.

¹⁸ IL 1140, at 3 n. 12.

related activities and may transfer customer funds “by any mechanism or device,” including through electronic means.¹⁹

The OCC has repeatedly recognized that banks may conduct permissible payment activities using new and evolving technologies. As discussed above, banks may use electronic means or facilities to perform any function, or provide any product or service, as part of an authorized activity.²⁰ Moreover, the OCC has explicitly permitted national banks to adopt new technologies as a means of executing payment services, consistent with safe and sound banking practices and applicable law. For example, the OCC has concluded that national banks may engage in activities related to electronic funds transfer systems,²¹ real-time settlement systems,²² and stored value systems as part of their permissible payments-related activities.²³ Courts have similarly recognized that banks’ authority to engage in payment activities encompasses new and evolving payment technologies.²⁴ These precedents are consistent with the fundamental principle that national bank powers “must be construed so as to permit new ways of conducting the very old business of banking.”²⁵

Using INVNs to facilitate payments transactions represents a new means of performing banks’ permissible payments functions. At their core, payment activities involve transmitting instructions to transfer a specified sum from one account on a ledger to another account on the same or a different ledger (either at the same bank or at different banks). Established payment systems typically use a trusted, centralized entity to validate payments. Serving as nodes on INVNs is a new means of transmitting payment instructions and validating payments.²⁶ Rather

¹⁹ See 12 C.F.R. § 145.17. As discussed above, FSAs are also permitted to use, or participate with others to use, electronic means or facilities to perform any function, or provide any product or service, as part of an authorized activity. See 12 C.F.R. § 155.200. For example, the Office of Thrift Supervision explicitly permitted FSAs to invest in electronic funds transfer networks. See OTS Op. Ch. Couns. (Dec. 22, 1995); OTS Op. Ch. Couns. (Sept. 15, 1995).

²⁰ See 12 C.F.R. § 7.5000 *et seq.*; 12 C.F.R. § 155.200.

²¹ See, e.g., IL 890; IL 854.

²² See, e.g., IL 1157; IL 1140.

²³ See, e.g., OCC Conditional Approval Letter 220; OCC Conditional Approval Letter 568; IL 737.

²⁴ *State of Illinois v. Continental Illinois National Bank*, 536 F.2d 176, 178 (7th Cir. 1976) (“Any order to pay which is properly executed by a customer, whether it be check, card or electronic device, must be recognized as a routine banking function. . .”); *Independent Bankers Association of America v. Smith*, 534 F.2d 921, 944 (D.C. Cir. 1976) (“We conclude that Congress envisioned all account withdrawals when it used the shorthand phrase ‘checks paid’ in section 36(f). If future technological innovations render paper checks totally obsolete, section 36(f) will still include within its broad standard those facilities that permit bank customers to perform the traditional banking function of withdrawing funds from their accounts.”).

²⁵ *M & M Leasing Corp. v. Seattle First Nat. Bank*, 563 F.2d 1377, 1382 (9th Cir. 1977) *cert. denied*, 436 U.S. 956 (1978).

²⁶ While the technology is new, the concept of using distributed ledgers to validate ownership and title is not. See e.g., Oliver Smith, Forbes, Blockchain’s Secret 1,000 Year History (Mar 23, 2018), available at <https://www.forbes.com/sites/oliversmith/2018/03/23/blockchains-secret-1000-year-history/#4484e42818d2>; Kristin Sommer, Phys.org, Team puts an ancient spin on a new digital currency (June 11, 2019), available at <https://phys.org/news/2019-06-team-ancient-digital-currency.htmlhttps://phys.org/news/2019-06-team-ancient->

than utilizing a centralized entity, nodes on the shared network validate the transfers. However, the basic functions are the same: transmitting payment instructions and validating payments. Accordingly, the same legal analysis applies, and a bank therefore may serve as a node on an INVN to facilitate payments transactions.

Likewise, a bank may use stablecoins to facilitate payment transactions for customers on an INVN, including by issuing a stablecoin,²⁷ and by exchanging that stablecoin for fiat currency.²⁸ In this context, stablecoins function as a mechanism of payment, in the same way that debit cards, checks, and electronically stored value (ESV) systems convey payment instructions. Banks have long used cashiers' checks, travelers' checks, and other bearer instruments as a means of facilitating cashless payments.²⁹

Twelve C.F.R. 7.5002(a)(3) expressly provides that a national bank may offer ESV systems. In an ESV system, cash is exchanged for ESV. That ESV is stored on a computer chip within a card. The cardholder makes payments by transferring that ESV to another party who may then redeem the ESV for cash. When codifying the authority of a national bank to offer ESV systems, the OCC noted that the "creation, sale, and redemption of [ESV] in exchange for dollars is part of the business of banking because it is the electronic equivalent of issuing circulating notes or other paper-based payment devices like travelers checks."³⁰ As the OCC had previously explained in Conditional Approval Letter No. 220, banks may engage in activities related to developing and operating an ESV system because ESV systems are an element of the payment system, and the issuance and redemption of ESV is a new way of conducting one aspect

[digital-currency.html](https://rsmus.com/what-we-do/services/blockchain-consulting/featured-topics/blockchain-basics/blockchain-and-the-island-of-yap.html); Sam Auch, rsmus.com, Blockchain and the Island of Yap, available at <https://rsmus.com/what-we-do/services/blockchain-consulting/featured-topics/blockchain-basics/blockchain-and-the-island-of-yap.html>.

²⁷ Certain stablecoins may be securities. A bank's issuance of a stablecoin must comply with all applicable securities laws and regulations. Staff of the Securities and Exchange Commission (SEC) has issued a statement encouraging issuers of stablecoins of the type described in IL 1172 to contact the staff with any questions they may have to help ensure that such stablecoins are structured, marketed, and operated in compliance with the federal securities laws. The statement notes that the staff stands ready to engage with market participants, and, depending on the particular facts and circumstances, to assist them and consider providing, if appropriate, a "no-action" position regarding whether activities with respect to a specific stablecoin may invoke the application of the federal securities laws. See SEC FinHub Staff Statement on OCC Interpretation (Sept. 21, 2020), [available at https://www.sec.gov/news/public-statement/sec-finhub-statement-occ-interpretation](https://www.sec.gov/news/public-statement/sec-finhub-statement-occ-interpretation).

²⁸ The OCC previously addressed the permissibility of a national bank holding reserves for stablecoins that are backed by fiat currency on at least a 1:1 basis. See IL 1172. In addition, the OCC has previously determined that a national bank may facilitate a customer's cryptocurrency and fiat currency exchange transactions. See IL 1170 n. 39.

²⁹ See, e.g., *Arnold Tours, Inc. v. Camp*, 472 F.2d 427, 438 (1st Cir. 1972). National banks may cash and process checks; issue, collect, and process cashiers' checks and money orders; and sell travelers' checks and certified checks. 12 U.S.C. 24(Seventh); 12 U.S.C. 4001 *et seq*; Conditional Approval No. 307 (April 1999). Banks may cash checks for non-customers. See OCC Interpretive Letter No. 1094 (Feb. 27, 2008); Interpretive Letter No. 932 (May 2002).

³⁰ Electronic Activities, 67 FR 34,992, 34,966 (May 17, 2002).

of payments: issuing and circulating notes.³¹ The OCC further noted that ESV-related clearing and settlement activities are similar to those already being performed by banks in connection with the large volume of transactions using checks, drafts, travelers' checks, credit cards, debit cards, and electronic transfers of funds within and through the payments system.³²

Like ESV, stablecoins can serve as electronic representations of those U.S. dollars. Instead of value being stored on an ESV card, the value is represented on the stablecoin. This distinction is technological in nature and does not affect the permissibility of the underlying activity. Banks may use new technologies that afford a new means of carrying out permissible banking functions, such as providing payments services and facilitating payments.³³ Using INVNs and related stablecoins to facilitate payments is merely a new means of performing that function.

Just as banks may buy and sell ESV as a means of converting the ESV into dollars (and vice versa) to complete customer payment transactions, banks may buy, sell, and issue stablecoin to facilitate payments.³⁴ For example, one entity (payer) may wish to remit a payment of U.S. dollars to a second entity (payee). Rather than using a centralized payment system, the payer converts the U.S. dollars to stablecoin and transfers the stablecoin to the payee via the INVN. The payee then converts the stablecoin back into U.S. dollars. In one common version of this fact pattern, the payment is a cross-border remittance. In certain circumstances, using INVNs and related stablecoins to facilitate the remittance may provide a cheaper, faster, and more efficient means of effecting the payment. The bank may serve several potential roles in

³¹ See OCC Conditional Approval Letter No. 220. Specifically, the OCC permitted banks to invest, via operating subsidiaries, in a company (Mondex LLC) that created, sold, and redeemed ESV. The OCC also permitted banks to serve as members in the ESV system. As described in the letter, members would issue ESV cards to individuals in exchange for dollars. These cards were intended to become a new element of the payment system substituting ESV for cash and small checks in consumer transactions. Mondex LLC would create and sell ESV to members in exchange for dollars. Mondex LLC would invest the dollars in government securities, cash, and cash equivalents. If a member tendered ESV to Mondex LLC, Mondex LLC would redeem the ESV at par. Members would sell ESV to individuals and participating retailers in exchange for dollars. ESV would be loaded onto the individual's card or retailer or retailer's "purse carrier device." Members would also purchase ESV from retailers and individuals.

³² See *id.*

³³ See, e.g., *State of Ill. ex rel. Lignoul v. Cont'l Nat. Bank & Tr. Co. of Chicago*, 536 F.2d 176, 178 (7th Cir. 1976) (concluding that debit cards constituted checks under the National Bank Act, despite technological differences between the two because "[t]he check is merely the means used by the bank to attain the desired objective, i.e., the payment of the money to its customer. The card serves the same purpose as the check. It is an order on the bank. Any order to pay which is properly executed by a customer, whether it be check, card or electronic device, must be recognized as a routine banking function when used as here. The relationship between the bank and its customer is the same."); *Smith*, 534 F.2d at 944 ("We conclude that Congress envisioned all account withdrawals when it used the shorthand phrase "checks paid" in section 36(f) [of the National Bank Act]. If future technological innovations render paper checks totally obsolete, section 36(f) will still include within its broad standard those facilities that permit bank customers to perform the traditional banking function of withdrawing funds from their accounts.").

³⁴ Moreover, buying, selling, and issuing stablecoins to facilitate payments responds to customer demand and benefits customers by offering faster and more resilient payment mechanisms. In addition, providing payment services using INVNs and related stablecoins may allow banks to offer services to a more diverse customer base. Finally, the risks associated with buying, selling, and issuing stablecoins are similar to those that banks assume in other permissible payment activities, including the provision of ESV systems.

this type of transaction: supporting the INVN by validating transactions as a node on the INVN, facilitating the conversion from U.S. dollars to stablecoin (and vice versa), and issuing the stablecoin.

III. Benefits and Risks

While the OCC neither encourages nor discourages banks from participating in and supporting INVNs and stablecoins, the recent adoption of INVNs and stablecoins by a major payment system operator,³⁵ coupled with the rapid market adoption of INVNs and stablecoins,³⁶ indicates that banks should evaluate the appropriateness of INVNs and stablecoin participation in order to ensure banks' continuing ability to provide payment services to their customers in a manner that reflects changing demand.

INVNs and stablecoins present both benefits and risks. Among the potential benefits is the fact that INVNs may enhance the efficiency, effectiveness, and stability of the provision of payments. For example, they may be more resilient than other payment networks because of the decentralized nature of INVNs. Rather than relying on a single entity (or a small number of parties) to verify payments, INVNs allow a comparatively large number of nodes to verify transactions in a trusted manner. Simply put, these networks may be more resilient because they have no single point of failure and can continue to operate even if a number of nodes cease to function for some reason and may be more trusted because of their consensus mechanisms requiring more nodes to validate the underlying transactions. In addition, an INVN also acts to prevent tampering or adding inaccurate information to the database. Information is only added to the network after consensus is reached among the nodes confirming that the information is valid.

The use of stablecoins to facilitate payments allows banks to capture the advantages that INVNs may present in a manner that retains the stability of fiat currency.³⁷ INVNs can transfer multiple different cryptocurrencies including but not limited to stablecoins. Stablecoins serve as a means of representing fiat currency on an INVN. In this way, the stablecoin provides a means for fiat currency to have access to the payment rails of an INVN.

Although the use of INVNs may provide certain advantages over other technologies, it may also present new risks. Banks that seek to use these networks should ensure that they understand these risks, as well as the risks generally associated with the underlying activity.³⁸ In addition, banks seeking to use these networks must conduct the activities in a safe and sound manner. These banks should also conduct a legal analysis to ensure the activities will be

³⁵ See supra n. 11.

³⁶ See supra n. 12.

³⁷ See, e.g., Advancing Our Approach to Digital Currency: Visa's Outlook on New Digital Currency Payment Flows (July 22, 2020).

³⁸ See, e.g., Comptroller's Handbook on Payment Systems and Fund Transfer Activities (March 1990); New, Modified, or Expanded Bank Products and Services: Risk Management Principles, OCC Bulletin 2017-43.

conducted consistent with all applicable laws, including applicable anti-money laundering laws and regulations and consumer protection laws and regulations.

Payment activities involving cryptocurrencies could increase operational risks, including fraud risk. Depending on the nature of the payment activity, activities involving stablecoins could entail significant liquidity risks for banks.³⁹ Moreover, new technologies require sufficient technological expertise to ensure a bank can manage them in a safe and sound manner and otherwise conduct the activities in compliance with applicable law, including applicable consumer protection laws and regulations. Banks have experience developing such expertise in analogous areas. These risks are similar (though potentially greater in degree) to those of other electronic activities expressly permitted for banks, including providing electronic custody services,⁴⁰ acting as a digital certification authority⁴¹ and providing data processing services.⁴² Risk management should be commensurate with the complexity of the products and services offered. New activities should be developed and implemented consistently with sound risk management practices and should align with banks' overall business plans and strategies.⁴³

Cryptocurrency payment activities could also raise heightened compliance risks. In particular, cryptocurrencies can present risks under anti-money laundering (AML) and countering the financing of terrorism requirements set forth in applicable laws, including the Bank Secrecy Act (BSA), because cryptocurrencies may be used by bad actors for the purposes of avoiding the financial system or engaging in other illicit activities. However, banks have significant experience with developing BSA/AML compliance programs to assure compliance with the reporting and recordkeeping requirements of the BSA and to prevent such usage of their systems by bad actors.⁴⁴ The OCC similarly would expect banks engaged in providing cryptocurrency services to customers to adapt and expand their BSA/AML compliance programs to assure compliance with the reporting and recordkeeping requirements of the BSA and to address the particular risks of cryptocurrency transactions.

A bank may validate, store, and record payments transactions by serving as a node on an INVN and use INVNs and related stablecoins to carry out other bank-permissible payment activities, consistent with applicable law and safe and sound banking practices. A bank should consult with OCC supervisors, as appropriate, prior to engaging in these payment activities. The OCC will review these activities as part of its ordinary supervisory processes.

Sincerely,

³⁹ See IL 1172.

⁴⁰ See Comptroller's Handbook on Custody Services at 70 (Jan. 2002).

⁴¹ 12 C.F.R. § 7.5005.

⁴² Id.

⁴³ See OC Bulletin-2017-43.

⁴⁴ See, e.g., 12 U.S.C. § 1818(s); 12 C.F.R. § 21.21; 31 C.F.R. § 1020.210; see also FFIEC, FFIEC BSA/AML Examination Manual, available at <https://bsaaml.ffiec.gov/manual> (database of BSA/AML policies and procedures).

/s/

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