Via Electronic Submission

December 1, 2021

Committee on Payments and Market Infrastructures
Bank for International Settlements
Centralbahnplatz 2
4002 Basel
Switzerland

International Organization of Securities Commissions
C/ Oquendo 12
28006 Madrid
Spain

Re: CPMI - IOSCO Consultative Report on Application of PFMI to Stablecoin Arrangements (October 2021)

Dear Colleagues:

We appreciate the opportunity to comment on the consultative report published by the Committee on Payments and Market Infrastructures (**CPMI**) and the International Organization of Securities Commissions (**IOSCO**) on the application of the Principles for Financial Market Infrastructures (**PFMI**)[1] to systemically important stablecoin arrangements (**SAs**) (the **Consultation**).[2] We appreciate the importance of clarifying the application of the PFMI—an important set of international standards for payment systems and other financial market infrastructures (**FMIs**)—to systemically important SAs. The Consultation provides guidance on how the PFMI could apply to systemically important SAs. The Consultation is an important recognition that the PFMI, which were developed before stablecoins existed, should be adapted to address technological advances, in this case based upon blockchain technology, and the resulting new payments services.

In October 2020, Meta Platforms, Inc. (**Meta**) created a new product group, Novi, which encompasses Meta's financial services business, including financial services provided through its subsidiaries Facebook Payments, Inc, Facebook Pagamentos, Facebook Payments International (FBPIL) and Novi Financial, Inc.[3] Among Meta's priorities for the work being carried out within Novi is providing low-cost, efficient, financially inclusive and accessible services that leverage the benefits of digitalization, including stablecoins. Novi Financial, Inc. currently offers digital wallet

[1] CPMI and IOSCO, *Principles for financial market infrastructures* (Apr. 2012), https://www.bis.org/cpmi/publ/d101a.pdf.

[2] CPMI and IOSCO, *Consultative report: Application of the Principles for Financial Market Infrastructures to stablecoin arrangements* (Oct. 2021), https://www.bis.org/cpmi/publ/d198.pdf.

[3] Both Facebook Payments Inc. and Novi Financial, Inc. are registered as money services businesses with the U.S. Financial Crimes Enforcement Network. Facebook Payments Inc. is also licensed in 47 U.S. states, D.C., Puerto Rico and the U.S. Virgin Islands, and Novi Financial, Inc. is also licensed or otherwise allowed to operate in most U.S. States and Territories, except for New York, Nevada, and the U.S. Virgin Islands.

services for USDP (Pax dollar) in the United States and Guatemala. Given Novi's activities and services involving stablecoins, we believe that CPMI and IOSCO's efforts are directly relevant to Novi and to Meta.

Our comments focus on a few key aspects of the Consultation. First, we comment on the designation criteria for systemically important SAs, which determine the scope of the application of the PFMI to SAs. We support the Consultation's holistic approach to the identification of systemically important SAs. We believe that applying such an approach weighs against designating a retail SA (as defined below) as systemically important, and particularly against designating a retail SA as systemically important on the basis of potential and unrealized future growth.

Next, this letter focuses on the application of PFMI Principle 8 on settlement finality to systemically important SAs, as described in the Consultation. We agree that it is critical for systemically important SAs to ensure clarity as to the timing of final settlement of stablecoin transfers, but we are concerned by the Consultation's focus on the probabilistic nature of settlement on blockchain-based systems and what the Consultation describes as a resulting potential discrepancy between legal settlement and technical settlement. We believe that CPMI and IOSCO should clarify that the use of an open blockchain system alone should not cause a systemically important SA to fail to satisfy the PFMI if the SA has otherwise put in place governance frameworks and clear rules for legal settlement finality that meet the expectations of the PFMI.

Finally, this letter comments on the application of PFMI Principle 9 on money settlement to systemically important SAs, as described in the Consultation. We agree with the approach taken by the Consultation, which clarifies that stablecoins may be analyzed in the context of Principle 9 as a privately issued settlement asset. We believe that CPMI and IOSCO should make clear that, taking certain risk-based factors into account, a systemically important SA may determine that a stablecoin is an acceptable alternative to central bank money that satisfies Principle 9. Such an acknowledgment is particularly important as the regulation of SAs is further developed at national levels, so that the application of this principle continues to be in line with the regulatory status of and risks arising from these arrangements.

I. Designation Criteria for Systemically Important Stablecoin Arrangements

As discussed in the Consultation, the PFMI apply to systemically important FMIs—that is, FMIs that are determined by national authorities to be systemically important in the jurisdictions in which they are located.[4] While the PFMI presume that all central counterparties, central securities depositories, securities settlement systems and trade repositories are systemically important, at least in the jurisdictions in which they are located, the PFMI do not presume that payment systems are systemically important.[5] Instead, the PFMI provide guidance for national authorities in determining whether a particular payment system FMI is systemic in its jurisdiction(s).[6]

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[4] See Consultation at 11 para. 2.1.1; PFMI at 12 para. 1.20.

[5] See Consultation at 11 para. 2.1.1; PFMI at 12 para. 1.20.

[6] See PFMI at 12 para. 1.20 ("[S]tatutory definitions of systemic importance may vary somewhat across jurisdictions, but in general a payment system is systemically important if it has the potential to trigger or transmit systemic disruptions; this includes, among other things, systems that are the sole payment system in a country or the principal system in terms of the aggregate value of payments; systems that mainly handle time-critical, high-value payments; and systems that settle payments used to effect settlement in other systemically important FMIs.").

We agree with the Consultation that SAs, where they facilitate the transfer of stablecoins, are appropriately viewed as engaged in payment system functions.[7] As described in the Consultation, SAs are primarily used for making payments and, as a result, the PFMI that apply to payment systems will apply to an SA.[8] By extension, the PFMI's approach to evaluating whether a payment system is systemically important should apply to evaluating whether an SA is systemically important. The Consultation sets out four considerations that national regulatory authorities would evaluate in assessing the systemic importance of a particular SA.[9] Those considerations are:

- ***Size*** of the SA, i.e., whether the stablecoin is used as a principal payment or settlement mechanism for the jurisdiction or market that it serves. Relevant factors include the number of users of the stablecoin, the number and value of transactions using the stablecoin and the value of the stablecoins in circulation.
- ***Nature and risk profile*** of the SA's activity, i.e., the type or nature of the stablecoin's transactions and users.
- ***Interconnectedness and interdependencies*** of the SA, i.e., whether the SA has significant interconnectedness and interdependencies with other systemically important FMIs, financial markets and governments, as well as the complexity of the SA.
- ***Substitutability*** of the SA, i.e., availability of alternatives to using the SA for payment or settlement for time-critical services.

The Consultation states that these considerations "are intended to be assessed holistically, rather than taking each point as an independent reflection of systemic importance (each point alone would not necessarily be sufficient to determine systemic importance)."[10]

We support a holistic approach to the identification of systemically important SAs, as recommended by the Consultation. We believe that applying such an approach weighs against designating an SA that is designed for retail payments and therefore (1) primarily offers payment services for individuals and businesses, not financial entities; (2) primarily offers retail transactions, not wholesale transactions; and (3) operates for the purpose of retail payments and remittances within and across borders, and not financial transactions (a **retail SA**) as systemically important, and particularly against designating a retail SA as systemically important solely on the basis of potential future growth. Applying each of the four considerations identified in the Consultation to a retail SA weighs against designating such an SA as systemically important.

- ***Size:*** A retail SA would likely have a smaller value per transaction and higher transaction velocities than wholesale SAs and, in general, a relatively small outstanding balance of stablecoins could support meaningful retail payments activities. Meta has been offering services in the retail payment space for over 10 years; the growth of retail payments on the Meta platform has been gradual with relatively low volumes. Thus, a retail SA is unlikely to be systemically important based upon potential growth and instead should be evaluated based upon its actual size and number of active users—not based upon assumptions of potential scale.
- ***Nature and risk profile:*** The Consultation views the types of users of an SA, the time criticality of the SA's transactions given possible disruption, the retail or wholesale nature

[7] See Consultation at 9 para. 1.3.3.

[8] *Id.*

[9] Consultation at 11-12 para. 2.1.3.

[10] *Id.*

of an SA's transactions, the use or purpose of an SA's transactions, and the denomination of the stablecoin and/or its reserve assets as relevant sub-components of the nature and risk of an SA. In the case of a retail SA, these factors weigh against a determination of systemic importance. A disruption to transactions at an SA that is designed for use by retail customers for small-value retail transactions is unlikely to pose significant contagion risk, unlike a disruption to transactions at an SA that is designed for wholesale use by financial entities or in connection with financial transactions or investments, monetary operations, or foreign exchange transactions.

- ***Interconnectedness and interdependencies:*** A retail SA would not be used to settle transactions for governments, important financial markets or other FMIs. Thus, a retail SA would be unlikely to present the interconnectedness and interdependencies associated with systemic importance.
- ***Substitutability:*** A retail SA would be highly substitutable, given the availability of numerous retail-focused payment and remittance services. Thus, a retail SA would be unlikely to present the non-substitutability associated with systemic importance.

As a result, CPMI and IOSCO should recommend that national authorities apply a presumption against designating a retail SA as systemically important—and particularly against designating a retail SA as systemically important based solely on its potential future growth. Unless and until a retail SA actually achieved widespread adoption, none of the four considerations identified in the Consultation would weigh in favor of a systemic importance designation. Even if a retail SA did achieve widespread adoption and therefore grow significantly in size, the other three considerations identified in the Consultation might still weigh against a systemic importance designation based upon the SA's model. Based on the Consultation's holistic approach, in such a case, the retail SA should not be designated as systemically important.

In addition, CPMI and IOSCO should encourage national authorities to consider the risk-reducing features of blockchain-based transfer systems, including SAs, in evaluating whether they are systemically important. By definition, stablecoin transfers occur on blockchain on a pre-funded, real-time gross settlement (**RTGS**) basis. On-blockchain transfers are pre-funded because blockchain systems only conduct transfers of tokens that are held in blockchain accounts; they settle in real time because blockchain transactions are processed continuously and rapidly; and they settle on a gross basis because on-blockchain transactions are not netted. The pre-funded, RTGS nature of on-blockchain transfers lowers the overall risk profile of SAs and other blockchain-based arrangements. An SA has no counterparty credit exposure to users in connection with the transfer of stablecoins on the blockchain. Settlement risk is low given the real-time settlement on the blockchain. National authorities should weigh these fundamental characteristics when assessing the overall risk profile of an SA in connection with determining whether an SA is systemically important.

II. Technical and Legal Settlement Finality on Blockchain-Based Systems

We appreciate the focus of the Consultation on settlement finality considerations for blockchain-based systems, including those used by systemically important SAs.[11] Principle 8 of the PFMI states: "An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time."[12] The PFMI defines "final settlement" as "the irrevocable and

[11] Consultation at 15-16.

[12] PFMI at 64.

unconditional transfer of an asset or financial instrument, or the discharge of an obligation by the FMI or its participants in accordance with the terms of the underlying contract."[13]

We agree that ensuring clarity as to the timing of final settlement of stablecoin transfers conducted through a systemically important SA is of critical importance, including to mitigate settlement risk. We are concerned, however, by the Consultation's focus on the probabilistic nature of settlement on blockchain-based systems, and what the Consultation describes as a resulting potential discrepancy between legal settlement and technical settlement. The Consultation describes this as occurring where "the relevant legal framework and the SA's rules and procedures have defined the point at which final settlement occurs" but where a "possibility remains that forks emerge that could lead to a reversal of technical settlement of transactions."[14] The Consultation goes on to state that this risk is increased where there is no legal entity responsible for the SA's transfer function, "including for setting and maintaining the rules and procedures to be followed in case of transaction reversals and forks."[15]

While we appreciate the concerns raised by the Consultation in this regard, we believe that the Consultation overstates the risk of forks. Whether a blockchain is based on the longest-fork-wins approach (e.g., Bitcoin and Ethereum) or Byzantine fault tolerance consensus among staking parties (e.g., Ethereum 2.0 and Algorand), finality is defined and observed on the blockchain publicly and immediately. Reverting a finalized transaction written on these blockchains after a certain period of time would be unlikely. Moreover, it would be a highly visible event that would effectively cause the community to pause the blockchain. Blockchains based on proof-of-authority present a fundamentally different approach where the security of finality may be provided contractually. In all of the above blockchain approaches, under proper guidance and supervision, an SA operator could establish controls to address even extreme situations (such as forking), should they arise. More generally, SAs should be expected to establish controls to guarantee authority over finality, an ability to remediate incorrect state as needed, and operational resilience under variable conditions.

By focusing on the risk of forks, the Consultation fails to recognize the benefits in resilience, security, and interoperability represented by open blockchain systems. We would strongly encourage the CPMI and IOSCO to reflect these attributes in the PFMI and avoid the implication that open blockchain systems could not be used by systemically important SAs. Indeed, CPMI and IOSCO should clarify that the use of an open blockchain system alone should not cause a systemically important SA to fail to satisfy the PFMI if the SA has otherwise put in place governance frameworks and clear rules for legal settlement finality, including remediation measures as needed by compliance and relevant law, and operational resilience, that meet the expectations of the PFMI. All electronic payment systems, not only blockchain systems, involve the potential for differences between technological finality of transaction recordation and legal settlement finality. Blockchain-based systems should not be treated differently under the PFMI solely on the basis of being blockchain-based if they otherwise satisfy the legal settlement finality requirements of the PFMI.

We welcome CPMI and IOSCO's continued work establishing guidelines on how blockchain-based SAs may address the PFMI. Different blockchains have different characteristics, and the application of guidelines on the PFMI may vastly differ across different platforms. In addition, blockchains are rapidly evolving, and the premature adoption of inflexible

[13] PFMI at 64 para. 3.8.1.

[14] Consultation at 16 para 3.4.3.

[15] Consultation at 16 para. 3.4.4.

criteria may result in guidelines that are ill-suited to technical realities. As a result, we encourage CPMI and IOSCO to adopt guidelines that are sufficiently flexible to apply to a range of current and future blockchains.

III. Clarification on Money Settlements

In developing the PFMI in 2012, CPMI and IOSCO understandably considered the financial transactions and FMIs that existed at that time. As recognized by the Consultation, certain aspects of the PFMI, without additional clarification, may be seen as incompatible with the fundamental characteristics of systemically important SAs. Key among these is Principle 9 of the PFMI, which states: "An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimise and strictly control the credit and liquidity risk arising from the use of commercial bank money."[16] As discussed in the Consultation, SAs do not settle transactions in central bank money or commercial bank money.[17] Rather, SAs settle transactions in stablecoins, and in some SAs, the stablecoin issuer and the "settlement institution" across whose books stablecoin transfers are made are two separate entities.[18] Thus, it may appear impossible for a systemically important SA to observe Principle 9 of the PFMI.

We agree with the approach taken by the Consultation, which makes more clear that stablecoins may be analyzed in the context of Principle 9 as a "privately issued settlement asset,"[19] and that stablecoins and systemically important SAs with certain characteristics should satisfy Principle 9. The Consultation states that "[a] stablecoin used by a systemically important SA for money settlements should have little or no credit or liquidity risk" and that "[w]hen seeking to observe Principle 9, a systemically important SA should determine whether the credit and liquidity risks of the stablecoin that it uses for money settlements are minimised and strictly controlled and the stablecoin is an acceptable alternative to the use of central bank money."[20] The Consultation then identifies various "relevant factors" in making that determination, including factors related to holders' rights and protections, the reserve assets, the process for converting the stablecoin into other liquid assets, and characteristics of the issuer of the stablecoin, provider of the settlement accounts and custodian(s) of the reserve assets.[21]

We agree that a systemically important SA should evaluate these factors in determining the risks relevant to a particular stablecoin for which the SA provides transfer services. We believe that, as global regulators evaluate the appropriate regulation of stablecoin issuers, more stablecoins are likely to meet these factors. We believe that CPMI and IOSCO should make clear that, taking these factors into account, a systemically important SA may determine that a stablecoin is an acceptable alternative to central bank money that satisfies Principle 9. CPMI and IOSCO should, however, avoid being overly prescriptive with respect to the relevant factors for consideration and should leave room for national authorities to consider other factors. Retaining this flexibility is particularly important both as the regulatory regimes for stablecoins develop and

[16] PFMI at 67.

[17] Consultation at 9 para. 1.4.2; 18 para. 3.5.6.

[18] Consultation at 18 para. 3.5.8.

[19] Consultation at 18 para 3.5.6.

[20] Consultation at 19 para. 3.5.11, 3.5.12.

[21] Consultation at 19-20 para. 3.5.12.

as SAs themselves evolve in response to changes in the regulatory environment and market forces.

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In summary, we support CPMI and IOSCO's joint effort to clarify the application of the PFMI to systemically important SAs and believe that, as described above, CPMI and IOSCO should provide additional clarity on the appropriateness of designation of retail SAs as systemically important, the use of permissionless blockchains and the use of stablecoins as a settlement asset.

Thank you for your consideration of our comments. If you have any questions regarding this letter, please do not hesitate to contact us.

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