I. Introduction

PayPal appreciates the opportunity to provide this letter in response to the Request for Comments (RFC) on digital assets and U.S. competitiveness issued by the Department of Commerce as part of the Biden Administration’s Executive Order on Digital Assets. Outreach with industry and experts in the digital asset field is critical as Commerce considers developing a framework for enhancing U.S. economic competitiveness in, and leveraging of, digital asset technologies pursuant to Section 8(b)(iii) of the Executive Order.

Digital assets and their associated technologies offer immense possibilities to create more efficient and effective payments systems. The Department of Commerce should recognize and champion the role that well-regulated and innovative U.S. payments companies can play domestically and abroad in best serving consumers and small business merchants. Payments can be a key area where the United States has a competitive advantage given the quality of technology and domestic regulation.

A whole of government approach is critical to ensuring the success of this technology and the industry, similar to the way prior Administrations approached the growth of the Internet over 20 years ago. We are again at a turning point in technological innovation. Now is the time to modernize and upgrade the technological infrastructure of the financial system – and the United States is well-positioned to lead both in terms of private sector innovation and public sector engagement.

To successfully lead in this industry, we must also understand the full regulatory and policy landscape, including those regimes that have been successful, in order to inform future policy. Commerce should accordingly study ways to promote the benefits of the responsible domestic payments industry. This future state cannot and will not be based solely on one model; rather, we must responsibly incorporate the rich landscape of companies looking to improve consumer and business financial services and outcomes.
1. The Future of Money

Advances in technology, including the use of digital assets and smart contracts, have the potential to fundamentally change the way in which payment and financial activities are conducted and the roles of financial infrastructures. Digital asset infrastructure represents the next generation for a digital economy – bringing enhanced efficiencies, programmability, speed, accountability, and more. Catalysts for change in financial services are being driven by a number of advances, including blockchain and distributed ledger technology (DLT). We need to embrace these principles, learn from them and support those that bring a better, more vibrant future.

We note and acknowledge at the outset, however, that the fundamental potential that digital asset technology presents can at times be obscured by high-profile failures of certain actors or specific financial assets they have developed. As with financial services and markets more broadly, some assets and platforms are well-designed, while others lack transparency or clear value propositions. While sound regulatory frameworks discussed below can mitigate associated risks, recent negative headlines should not distract from the significant benefits that digital asset infrastructure and related financial instruments can provide to consumers domestically and across the globe.

As it stands today, the current payment rails are inconvenient and expensive, taking days to settle transactions, providing limited visibility to businesses conducting international payments, and charging high fees – especially to lower-income and underbanked segments of the population that are forced into costly check cashing, money order, payday lending, and remittance services.

New technologies and thoughtful regulation provide an opportunity to reshape the financial system to benefit the underserved; to support businesses, professionals, and creators with faster, lower cost payments as well as access to credit; and, to relieve financial stress for the general public. Responsible innovation in payment systems, lending, digital currencies, digitized protocols, digital identity and in the fight against fraud and financial crime can bring a new era of equitable, low cost, and accessible financial services. The time is ripe to modernize and upgrade the technological infrastructure of the financial system – and the United States is well-positioned to lead both in terms of private sector innovation and public sector engagement.

The combination of government policy support, public research funding, private innovation, global attraction of talent, and appropriate regulation cemented the role of the United States at the center of the digitization of communications, media, commerce,
and financial services in the form of web 1.0 and web 2.0. Achieving the same leadership position in web3 is possible but should not be taken for granted.

Interest in digital assets has accelerated over the past year and half because of the digitization of all economic activities, in part due to the COVID-19 pandemic. At PayPal, we have seen the digitization of verticals that have traditionally been brick and mortar, such as grocery and meal delivery. We have also seen the growing importance of omni-channel capabilities for commerce, which is especially important as we support economic recovery by supporting the integration of small businesses into the digital economy.

We have been learning a great deal about digital assets, establishing in early 2022 a cross-disciplinary advisory council for our Blockchain, Crypto and Digital Currencies unit comprised of some of the world’s leading experts in cryptography, distributed technology, regulation, economics, and capital markets. And, we’re committed to working with governments and regulators to help responsibly shape the future of digital financial services. We believe CBDCs, digital currencies, and stablecoins could be great additions to the payment options available to businesses and consumers and complement the current retail payments system. And we believe that it is critical for the U.S. government to play a leadership role in supporting the rise of domestic industry and fostering a cohesive global policy framework for the digital asset ecosystem.

2. Financial inclusion and financial health benefits of crypto currencies

Given PayPal’s long-standing focus on technology-driven innovation that can improve the financial lives of consumers and small business owners around the world, we bring a unique perspective to the topic of digital money and its potential evolution. Indeed, PayPal has remained at the forefront of the digital payment revolution for more than 20 years. By leveraging technology to make financial services and commerce more convenient, affordable, and secure, the PayPal platform is empowering more than 425 million consumer and merchant accounts in more than 200 markets to join and thrive in the global economy.

It is well documented that nearly 7.1 million households in America remain unbanked, with the majority of such households being Black and Hispanic. Despite some evidence of progress, roughly 13.8% of Black households and 12.2% of Hispanic households were unbanked according to a 2019 FDIC survey.¹ Notably, a separate 2021 survey found that

one of the primary reasons individuals remain unbanked is due to distrust of banks given experience with surprise punitive fees, such as overdraft.\(^2\)

The underbanked represent an additional subsegment of the U.S. population that is currently underserved by the financial system. Approximately 20% of U.S. households are considered underbanked, meaning that they used alternative financial products outside the banking system.\(^3\) 30% of Americans worry daily about the amount of debt they carry and 32% have difficulty paying for basic household expenses including food.\(^4\) A further 67% of Americans are not financially healthy, meaning they have little financial cushion if economic conditions worsen.\(^5\) 69% of Americans are living paycheck-to-paycheck, meaning they would experience financial difficulty if paychecks were delayed for a week.\(^6\) And, 77% of Americans report feeling anxious about their financial situation.\(^7\)

Concurrently, there is growing global evidence of gradual decreases in the use of physical cash. Though likely impacted by the COVID-19 pandemic, a recent survey found that cash only accounted for 19% of transactions by individuals in 2020, marking a decline of seven percentage points from 2019.\(^8\) An early 2021 survey conducted by PayPal found that 26% of consumers in the United States hoped to use less cash during the year and 58% liked the idea of not having to carry cash or coins.\(^9\) Additionally, 73% of those surveyed in the United States stated they would be likely to use a secure U.S. 

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\(^7\) CNBC, *77% of Americans are anxious about their financial situation—here’s how to take control*, May 2022, https://www.cnbc.com/select/how-to-take-control-of-your-finance/.


CBDC that is usable online and everywhere cash is accepted. That percentage was even higher with younger demographics, including millennials.⁠¹⁰

Crypto currencies like bitcoin, ether, and stablecoins, and government-issued CBDCs, potentially satisfy currently unmet and future payments needs. For example:

1. Crypto currencies, including stablecoins and CBDCs, made available through a digital wallet service offered by regulated financial services firms are likely to impact a meaningful percentage of currently un- and underbanked individuals.⁠¹¹ There are numerous and complex causes that contribute to unbanked and underbanked populations. We need to study these and address them individually – there will be no one solution to this global problem. It is a problem that deserves thought and action, which may need to come in small doses to test solutions for effectiveness or recalibrate to achieve the desired results. While crypto currencies may not succeed in converting all unbanked and underbanked persons into those that fully utilize the needed financial services, even impacting a small percentage of the 20% of U.S. households that are underbanked is worthwhile and should be fully considered.

Non-bank financial services providers like PayPal and Venmo play an important role in reaching Americans. We typically offer free onboarding and do not require minimum balance. Additionally, PayPal’s two-sided platform connects both consumers and merchants in a seamless manner. Our services provide a favorable experience for the consumer and entree into a digital marketplace that does not typically accept cash or checks.

Digital wallets could be tailored to offer access to digital currency, custody, and related payments services. These offerings would be in parallel with other payments services, providing competition and consumer choice. Once onboarded through a digital wallet service, a previously unbanked or underbanked individual would find herself connected to the global financial system and e-commerce platforms.

2. Further digitization of the small business sector, which makes up 99% of all businesses in the United States, can be facilitated by crypto currencies. These could support small business merchants by providing them (and customers)

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with a new form of payment, especially given reduced physical cash dealings and the trend toward reduced cash usage. For example, small business owners may find receiving business-to-business (B2B) payments from others in the small and medium-sized enterprises (SME) supply chain a particularly compelling use case for digital currencies. Those SME merchants whose purchases are invoiced in a CBDC or private digital currency will likely want to invoice in the same currency to ensure they can easily make those purchases. Digital networks with private digital currencies can be particularly effective at yielding access and utility benefits, allowing for new possibilities for commerce. As economies move away from physical money, the United States should look to offer the public access to modern, digital forms of cash.

3. Sending **international remittances** to loved ones overseas may incur lower fees and take fewer days with a more efficient infrastructure. Many individuals face high fees sending money across borders due, in part, to numerous intermediaries; crypto currencies that are readily exchanged across borders hold promise in connecting funds more directly, quickly, and efficiently to those who need them.

4. The **disbursement of government-to-person (G2P) payments** could take place quickly at scale, which can provide critical relief in times of disaster and crisis. Second, the impact on G2P payments could be immense. CBDC, built upon a robust and secure digital identity infrastructure, could enable these individuals to receive money into their accounts in a far more timely manner. G2P payments provide a lifeline to millions of Americans and can be made far more efficient through a CBDC.

The pandemic underscored the importance of access to accurate, timely, safe, efficient, and affordable payments for all Americans and the high cost associated with being unbanked and underbanked. While the large percentage of pandemic relief payments moved via direct deposits to bank accounts, it took weeks to distribute relief payments in the form of prepaid debit cards and checks to households that did not have up-to-date bank account information with the Internal Revenue Service. Approximately 35 million individuals had to wait for months to receive their stimulus checks, if they received them at all.¹²

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PayPal was honored to participate in the disbursement of stimulus checks. In the first round alone, 100,000 payouts were made to PayPal and Venmo accounts using the Direct Deposit feature. In the second round, 117,000 payouts were made via PayPal and Venmo using that feature. Instead of waiting for physical checks to be printed and mailed and later cashed and deposited, individuals and households could submit their PayPal account details directly to the IRS website and elect to receive their stimulus payment into a PayPal Balance account. The challenges of getting relief payments to these households highlighted the benefits of delivering payments more quickly, cheaply, and seamlessly through upgraded digital infrastructure, and CBDCs can be a means of increasing financial inclusion and improving financial health. Additionally, G2P payments delivered as a programmable CBDC could be designated only for certain purposes (e.g., discounted groceries), to encourage tax-advantaged savings schemes, and/or to nudge consumers toward savings (e.g., automate savings as default).

5. Digital currencies are also responsive to clearly shifting preferences among consumers. Younger generations are increasingly reliant on mobile access to digital services, and digital currencies meet them where they are.

6. Given the likely speed, efficiency, and cost benefits of digital currencies (public and private), low-income individuals should be able to shift certain financial activity away from high-cost legacy providers, including check-cashers and payday lenders, that often come with significantly higher fees. The cost and inefficiencies of the payments system often manifest in the high fees consumers pay to use alternative financial services providers, such as check cashers ($2 billion annually) and small-dollar payday lenders ($7 billion annually), and when experiencing bank overdraft fees ($24 billion annually) in the U.S. The average American household pays nearly $250 in these types of fees every year.

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Moreover, when consumers incur these fees, it can greatly impact their credit eligibility and costs, which then compounds the negative impact on financial health.

These are tremendous opportunities, and they would be dependent on the design, product, policy, and regulatory choices around CBDCs and other digital currencies, which are complex and need to be carefully researched.

III. Ensuring and Fostering U.S. Innovation and Global Competitiveness

a. Focus on activity, not the technology.

We urge the Administration to follow the key principle in financial services to regulate the activity, not the technology. The level of regulation and its unique components should depend on the risks that the government seeks to address. Whether it is to prevent illicit finance, protect consumers, or safeguard assets; regulatory and legislative policy seeks to encourage the type of conduct and develop the appropriate safeguards to achieve those results. As a result, law and policy should ensure that rules are fit for purpose - they achieve the boundaries and conduct sought while refraining from impeding the appropriate development of the product or service offered.

b. Assess the current landscape before developing a new approach.

To understand where we need to go, we must understand where we sit today. The financial services regulatory landscape is complex, spanning multiple federal agencies, some of whom are market and others prudential regulators, as well as state banking and other departments. We must engage in a fulsome assessment of the existing government approach to blockchain and DLT – legislation and regulation at both the state and federal level, and what enforcement activity has already occurred. This will help us to understand the current effectiveness of the existing regime. Only at that point can we better understand what gaps exist and tailor any subsequent action to address those concerns.

The U.S. Department of Commerce is ideally positioned to lead this broader “digital asset technology and blockchain” effort, similar to the historical work of the National Telecommunications and Information Administration (NTIA), which advises the President on telecommunications and information policy issues. NTIA has been instrumental in setting U.S. policy and standards, including with respect to Internet development. In this regard, a new Commerce Department effort focused on digital assets and blockchain, which could include a public-private working group focused on
digital assets, could tailor its work to simultaneously solve for this in combination with other key agency priorities, including promoting small business.

c. **Support forward-leaning regulatory frameworks for innovative U.S. payments providers that foster competition, provide diversity, and protect consumers.**

The financial services landscape in the United States remains one of the most dynamic in the world, though continued forward-leaning policies are needed to expand financial access and promote pro-consumer innovation. The foundation of financial services development in the United States is predicated on recognizing and supporting a diverse range of financial services companies through tailored regulation that mitigates identifiable risks. For this reason, we strongly urge Commerce to champion financial regulatory frameworks that allow for a diversity of actors and the fostering of innovation rather than one-size-fits-all approaches that will necessarily box in further pro-consumer development and limit choice.

**The U.S. payments landscape & development of a competitive advantage**

Financial services in the United States are supported by a broad range of actors, including financial technology companies that can serve as direct providers (either as banks or payments providers), or as partners and vendors to banks and nonbank payment providers. All such actors are currently subject to well-established regulatory frameworks that are indicated based on the activities engaged in by the actor (activity-based regulation) and the type of entity the actor chooses to be (entity-based regulation).\(^{17}\)

In the case of actors seeking to avail themselves of the privileges of being a bank, they are subject to the dual banking system that permits choice between state-based or national bank chartering. In the case of nonbank financial providers engaging in lending or payments activity, they are subject to robust and established state-based licensing frameworks. And, in the case of partners and vendors, they are subject to third-party vendor risk management frameworks and related bank regulatory guidance. In all cases, key consumer protection laws apply, as do AML/KYC requirements.

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The nature of the current U.S. financial regulatory system has permitted the development of a robust ecosystem of providers and innovators all subject to sound consumer protection safeguards. This diversity is a source of strength and resiliency and should be supported as a matter of national policy to enhance overall competitiveness. To this end, policymakers should avoid applying one-size-fits-all regulation on financial services actors and forcing all activity into traditional insured depository bank chartering frameworks. To the contrary, policymakers, including at Commerce, should recognize and champion the role that well-regulated and innovative U.S. payments companies can play domestically and abroad in best serving consumers and merchants. **Payments can be a key area where the United States has a competitive advantage given the quality of technology and regulatory frameworks. Commerce should accordingly study ways to promote the benefits of the responsible domestic payments industry.**

In the case of PayPal, we are a state-licensed provider, registered with FinCEN, that frequently works in partnership with banks and traditional financial institutions to offer regulated financial services products. As noted above, we believe that digital assets, including a US CBDC and regulated stablecoins, hold particular promise in advancing inclusion and financial health if such assets are subject to distribution by regulated entities beyond traditional banks.

More specifically, the traditional banking system has faced challenges in reaching all segments of the population, especially historically disadvantaged, minority, and low-income groups. Recent research underscores this dynamic by noting that non-bank fintech providers were far more effective in reaching minority-owned businesses during the COVID-19 pandemic to offer them Paycheck Protection Program (PPP) relief. For example, PayPal’s PPP loan program is over-indexed in the majority of the top 30 counties that have the highest density of Black business activity and heightened incidence of COVID-19. The coverage rate for PayPal-facilitated PPP loans is above average in 23 out of these 30 counties, in sharp contrast to the overall PPP, in which the coverage rate is below average in 22 out of these 30 counties.

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20 Id.

Indeed, there is clear evidence that regulated payments providers are increasingly providing key services for underserved consumers.\textsuperscript{22} For example, PayPal Working Capital (PPWC) loans are distributed to areas with greater concentrations of minority populations, helping to close the gap in access for minority entrepreneurs. The percentage of total PPWC loans going to census tracts with greater than 25% African American population share is slightly higher than traditional SMB loans (13\% vs. 11\%). Also, this same group of borrowers are growing more quickly than the average SMB (22\% vs. 9\%).\textsuperscript{23}

Given the ability of regulated payments companies to reach broader populations, it is critical that digital assets, including a U.S. CBDC and stablecoins, be offered and distributed through both regulated banks and regulated payments firms, including state-regulated money transmitters and trust companies. As previously noted, distribution would likely occur through digital wallet services, which would offer tailored custodial and payments services. Such offerings are ideal products for responsible payments providers that specialize in nimble, consumer-friendly applications, as well as connectivity with other service providers. Digital assets offer a unique opportunity to leverage a broader set of regulated entities to help expand access to digital financial services.

With respect to balances held by customers in accounts managed by responsible payments providers, it is important to note that the funds underlying such balances are subject to “permissible investments” requirements under state laws. More specifically, customer balances must be fully supported by permissible investments in an amount that meets outstanding customer liabilities, as defined by state law. State-based permissible investment requirements include categories such as cash, bank deposits, and U.S. government securities. These are bankruptcy remote reserves that are available in the event of default by the service provider and that have a sound track record across decades, including through the Great Financial Crisis.

In order to promote continued innovation in U.S. financial services and maximize the inclusionary benefits of digital assets, we urge Commerce to \textbf{champion tailored regulatory frameworks that promote choice and diversity among and across financial}


services providers. To this end, chartering and licensing regimes that recognize the specifics of business models and tailor requirements to solve for identifiable risks can best unlock responsible innovation.

**Global Payments Frameworks**

There are a number of examples of jurisdictions across the globe taking steps to foster well-regulated financial services innovation through tailored licensing and chartering regimes. For example, the United Kingdom began granting payments providers with direct access to the Bank of England’s faster payments network in 2018 to foster competition, lower costs, and payments innovation. A number of other leading jurisdictions are looking to follow suit, including the EU, Canada, Japan, and Australia.

To maintain its competitive edge and continue to foster pro-consumer financial services innovation, it is critical that the United States build on its existing financial regulatory foundation and foster ongoing modernization. By recognizing the central role of financial technology, including digital assets, U.S. national policy can encourage the development of cohesive and tailored chartering and licensing regimes that recognize the important role of state and federal agencies, while ensuring consumer protection and the safety and soundness of the financial system. This future state cannot and will not be based solely on traditional banks but must responsibly incorporate the rich landscape of companies looking to improve consumer financial services and outcomes.

**d. The Need for U.S. Leadership in Advancing Global Digital Asset Standards and Policy Principles in Partnership with the Private Sector.**

Given the potential for the technologies underpinning digital assets to form the next generation of financial services infrastructure, governments around the world are taking steps to champion domestic innovation and industry. It is well known that China is the global leader in piloting its CBDC, the digital yuan (or e-CNY), and that leading jurisdictions, including Europe, the UK, and Korea, are taking steps to support digital asset development. This accordingly marks a unique time where a “whole of government” approach is needed to support U.S. digital asset innovation that

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incorporates core democratic values and a focus on privacy, security, and consumer protection.

**Case study: the internet**

The late 1990s provides a useful case study of how the U.S. government proactively helped shape the development of another key technology, the Internet. In 1997, the Administration released “The Framework for Global Electronic Commerce,” which outlined a national policy approach to foster the responsible development of the Internet. The Framework was based on five principles, including that: (1) the private sector should lead; (2) government should avoid undue restrictions on electronic commerce; (3) where government intervention is indicated it should aim to be minimalist and simple; (4) government must work to understand the unique qualities of the Internet; and (5) electronic commerce should be facilitated globally. The Framework further highlighted the importance of private sector-driven standards efforts, and the role of the U.S. government in working with the private sector to help establish sound global frameworks and approaches to the Internet’s development.

The Clinton Framework drove what became a “whole of government” approach in the United States and should be replicated by the U.S. government today in light of the digitization of financial infrastructure. More specifically, respective government agencies should take the lead – in close consultation with the private sector – within global forums to advance key U.S. norms and interests.

Key topics requiring U.S. leadership include CBDC governance, privacy, cyber security, and overall digital asset interoperability. Digital assets payments will only maximize their potential if they can operate alongside – and interchange with – existing monetary and payments systems. For this reason, digital asset infrastructure must satisfy U.S. standards, not just domestically, but globally. This is also critical for the U.S. Dollar to maintain its status as the primary global reserve currency and for the country to maintain its central role in global financial markets. For this reason, we encourage the Federal Reserve and broader U.S. government to explore the development and launch of a digital dollar.

As we noted in our comment letter to the Federal Reserve Board, we agree with the Board that a “CBDC would represent a highly significant innovation in American money”

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26 PayPal, Response to Request for Comment on “Money and Payments: The U.S. Dollar in the
and, if properly designed, could provide individuals and small businesses with substantial benefits, including increased access to financial services, lower costs, faster transaction speeds, enhanced privacy, and greater optionality, leading to overall improved financial health. We further believe that any exploration into a new digital dollar necessarily includes collaboration between government and industry representatives experienced in technology, financial services and payments, and illicit finance. It is critical that any digitized dollar be carefully and thoughtfully planned and tested, and tested again, to ensure the vibrancy of U.S. currency for centuries to come. The private sector will play an important role in distributing a CBDC, enabling interoperability, and facilitating use among consumers, including the un- and under-banked. The private sector will also be critical to developing standards for the design and implementation of a digital dollar.

The need for standards

To this end, when it comes to standards development related to digital assets, the Clinton Framework is again a good reference. The Framework specifically highlighted the importance of public-private partnership around standards and avoiding prescriptive measures that prematurely direct or stunt further innovation. More specifically, when discussing technical standards, the Framework stated:

*Standards are critical to the long term commercial success of the Internet as they can allow products and services from different vendors to work together. They also encourage competition and reduce uncertainty in the global marketplace. Premature standardization, however, can "lock in" outdated technology . . . The United States believes that the marketplace, not governments, should determine technical standards and other mechanisms for interoperability. Technology is moving rapidly and government attempts to establish technical standards to govern the Internet would only risk inhibiting technological innovation. The United States considers it unwise and unnecessary for governments to mandate standards for electronic commerce. Rather, we urge industry driven multilateral fora to consider technical standards in this area.*

For this reason, we recommend that Commerce explore the formal development of public-private platforms to advance digital asset standards, including by replicating relevant aspects of NTIA’s early development of the Internet Corporation for Assigned Names and Numbers (ICANN) and developing working groups to discuss specific needs for digital assets. By investing in standards and including leading U.S. private sector

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expertise, we can ensure that the future of global and interconnected digital infrastructure is imbued with U.S. norms, values, and know-how.

Based on recent research published by the Atlantic Council, it is clear that global standards development is timely and needed. More specifically, the Atlantic Council noted that while a CBDC would be subject to many of the same cybersecurity risks as the existing financial systems, deployment of a CBDC would also create new risks (e.g., potential increased centralization of payment processing and sensitive user data; challenges in payment credential management and key custody). The exact set of new cybersecurity risks depends largely on the design choices, which would lead to differences in terms of system scalability, system robustness, user privacy, and networking requirements.\(^27\) In addition to applying existing risk management frameworks and regulations, and based on robust public-private consultation and collaboration, the United States has an opportunity to lead the development of global interoperability and stability standards through international coordination on regulation and standard setting via fora like the Group of Seven (G7), the Group of Twenty (G20), the Financial Stability Board (FSB), and the Financial Action Task Force (FATF).

**Proactive Support**

Finally, policymakers across the U.S. government should look for opportunities to support and nurture the responsible development of domestic digital asset innovation. Whether by way of adopting tailored regulatory frameworks as outlined above, or simply encouraging product innovation, the government can create an environment conducive to digital asset development. This approach proved effective with respect to Internet development in the 1990s and can do the same for the digital asset and payments industry today.

### III. Responses to Specific Questions

The following include our responses to specific questions in the Commerce RFC, to the extent not answered above.

**Competitiveness**

(6) What, if any, is the future role of digital assets mining in the U.S. digital assets sector? Can digital assets be compatible with a low-carbon economy that emphasizes

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renewable energy? If so, how? In what ways can the U.S. government and U.S. companies drive competitive, sustainable (for the environment and energy consumption) development of digital assets?

Digital assets across different consensus mechanisms require different levels of electricity. Many protocols are using or adopting Proof-of-Stake (PoS) consensus mechanisms, which are more energy efficient. The consensus mechanisms that use Proof-of-Work (PoW), such as Bitcoin, are looking into ways to use more renewable energy and more efficient hardware to reduce emissions.

As a leader in the digital currency space, PayPal is focused on advancing our mission of democratizing financial services, while responsibly managing and reducing our environmental impact. PayPal is proud to have supported the development of the Crypto Climate Impact Accounting Framework, co-authored by the Crypto Carbon Ratings Institute (CCRI) and South Pole.28 This initial effort enables better understanding of how companies involved in the cryptocurrency ecosystem can begin to account for their emissions, which is a first step in determining how to reduce those emissions.

The Framework promotes the hybrid allocation model that takes into account both the holding and transacting use cases of cryptocurrencies. Since crypto network validators are incentivized by block rewards and transaction fees, greenhouse gas (GHG) emissions are allocated to crypto value chain participants (stakeholders) based on both the value of that stakeholder’s holdings (which drives block reward revenue for validators) and the transaction fees paid by the stakeholder (which drives transaction fee revenue for validators).

Within this framework, we recognize that just holding bitcoin (and other PoW currencies) requires the blockchain to be secured, which has a climate impact. The hybrid model allows us to compute that and account for it, and we’re working with protocol developers, industry players, and miners to implement solutions that will allow us to bring down that impact as well.

We welcome the opportunity to work on a public private partnership to improve reporting around greenhouse gas emissions from digital asset technology.

(7) What impact, if any, will global deployment of central bank digital currencies (CBDC) have on the U.S. digital assets sector? To what extent would the design of a U.S.

CBDC (e.g., disintermediated or intermediated, interoperable with other countries' CBDCs and other domestic and international financial services, etc.) impact the sector?

The importance of the U.S. dollar and its ubiquity in international payments is based on many factors, including the country’s underlying economic infrastructure, governmental and financial stability, rule of law, and global trust. While several countries aim for their currencies to play a greater role internationally to reduce dependence on the dollar, the persistent strength of the dollar indicates the formidable advantages it enjoys.

If the U.S. dollar is to remain the world’s primary reserve currency in the unfolding century, then being at the forefront of technological innovation that reduces friction in payments should be an area of focus. Accordingly, the U.S. government and the Federal Reserve Board should actively explore and consider new digital forms of money that can most effectively operate in an increasingly digital world. PayPal believes that a digital dollar could be a logical next iteration to futureproof the U.S. dollar. A properly designed digital dollar could promote diversification of the payment system and spur financial innovation, inclusion, and global currency interoperability.

To maximize the benefits of a CBDC, the private sector should play a key role in developing new technologies, partnering with the Fed on implementation and distribution, and expanding digital dollar access to the un- and underbanked to drive financial health.

(10) Beyond enhanced economic competitiveness, how can the U.S. digital assets sector advance the other objectives outlined in the Executive Order? These other objectives include protection of consumers, investors, and business in the United States; protection of United States and global financial stability and the mitigation of systemic risk; and mitigation of illicit finance and national security risks posed by misuse of digital assets.

To understand where we need to go, we must understand where we sit today. The financial services regulatory landscape is complex, spanning multiple federal agencies some of whom are market and others prudential regulators, as well as state banking and other departments. For example, in the United States, the NY Department of Financial Services has promulgated a “BitLicense” and recently published Guidelines for Stablecoins. Examples exist around the world where payments providers are regulated as such, according to the risks they present. We must engage in a fulsome assessment of the existing government approach to blockchain and DLT legislation and regulation at both the state and federal level, and what enforcement activity has already occurred. This will help us to understand the current effectiveness of the existing regime and
where, as a policy matter, we want to go. Only at that point can we better understand what gaps exist and tailor any subsequent action to address those concerns.

The U.S. Department of Commerce is ideally positioned to lead this broader “digital asset technology and blockchain” effort, similar to the historical work of the National Telecommunications and Information Administration (NTIA), which advises the president on telecommunications and information policy issues. NTIA has been instrumental in setting US policy and standards, including with respect to Internet development. In this regard, a new Commerce effort focused on digital assets and blockchain, which should include a public-private working group focused on digital assets, could tailor its work to simultaneously solve for this in combination with other key agency priorities, including promoting small business.

Comparisons to ‘Traditional’ Financial Services and Financial Inclusion Considerations

(12) What factors and conditions, if any, that have driven and sustained the global leadership of U.S.-based legacy financial institutions will foster the same leadership for U.S. digital asset businesses? If there are no common factors, what factors and conditions will differentiate global competitiveness for U.S. digital asset businesses?

As described above, the late 1990s provides a useful case study of how the U.S. government proactively helped shape the development of another key technology, the Internet. In 1997, the Clinton Administration released “The Framework for Global Electronic Commerce,” which outlined a national policy approach to foster the responsible development of the Internet.29 The Framework was based on five principles, including that: (1) the private sector should lead; (2) government should avoid undue restrictions on electronic commerce; (3) where government intervention is indicated it should aim to be minimalist and simple; (4) government must work to understand the unique qualities of the Internet; and (5) electronic commerce should be facilitated globally. The Framework further highlighted the importance of private sector-driven standards efforts, and the role of the U.S. government in working with the private sector to help establish sound global frameworks and approaches to the Internet’s development.

The Clinton Framework drove what became a “whole of government” approach in the United States and should be replicated by the U.S. government today in light of the digitization of financial infrastructure. More specifically, respective government

agencies should take the lead – in close consultation with the private sector – within global forums to advance key U.S. norms and interests.

Technological Development

(15) To what extent do new standards for digital assets and their underlying technologies need to be maintained or developed, for instance those related to custody, identity, security, privacy, and interoperability? What existing standards are already relevant? How might existing standardization efforts be harmonized to support the responsible development of digital assets?

A digital identity framework is necessary to modernize robust and inclusive economic infrastructure, including for digital currencies. Access to digital financial services and tools that will make all areas of life more convenient is predicated on the ability of providers to verify the identity of individuals seeking such access. Digital identity solutions that are inclusive, interoperable, and broadly adopted can also be used as reliable enablers for the delivery of a range of services that require proof of identity, such as licenses and welfare payments. A broad policy initiative, such as the Improving Digital Identity Act of 2020, can establish a government-wide effort to develop secure methods for Federal, State, and local agencies to validate identity attributes and to support interoperable, secure, and privacy-preserving digital identity verification in both public and private sectors.³⁰

(16) What new security concerns does increased adoption of digital assets raise? How can the U.S. government collaborate with U.S. digital asset businesses to protect consumers’ access to their assets, personal information, and other sensitive data?

According to the newly published research by the Atlantic Council, while a CBDC would be subject to many of the same cybersecurity risks as the existing financial systems, deployment of a CBDC would also create new risks (e.g., potential increased centralization of payment processing and sensitive user data; challenges in payment credential management and key custody). The exact set of new cybersecurity risks depends largely on the design choices, which would lead to differences in terms of system scalability, system robustness, user privacy, and networking requirements.³¹ To ensure security without compromising innovation, policymakers can use existing risk

management frameworks and regulations when possible, and craft new regulations to set the conditions for a safe digital currency ecosystem that enables financial intermediaries to innovate and compete.

Moreover, to increase the resiliency of financial systems against cybersecurity risks, policymakers should develop rules to ensure that a CBDC is interoperable with the country’s relevant financial infrastructure. To strengthen the security of CBDC systems, U.S. leadership is critical to promote global interoperability between CBDCs through international coordination on regulation and standard setting through fora like the Group of Seven (G7), the Group of Twenty (G20), the Financial Stability Board (FSB), and the Financial Action Task Force (FATF).

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