



R3 RESPONSE TO THE BASEL COMMITTEE ON BANKING SUPERVISION'S SECOND CONSULTATIVE DOCUMENT ON THE PRUDENTIAL TREATMENT OF CRYPTOASSET EXPOSURES

September 2022

As a distributed ledger technology (DLT) software provider for the banking and financial services industries, R3 welcomes the Basel Committee on Banking Supervision's (the Committee's) Second Consultative Document on the Prudential Treatment of Cryptoasset Exposures.

We appreciate the Committee's continued focus and steadfast effort to develop a comprehensive prudential framework for cryptoasset exposures. We believe that cryptoassets offer tremendous potential, but also require careful attention to maintain the soundness and stability of financial institutions and the wider economy.

We would be delighted to discuss any of the important points and topics outlined here or wider points raised in the Second Consultative Document with the Committee further.

Introducing R3

R3 is an enterprise software company enabling digital transformation through our DLT and confidential computing platforms. Our applications and solutions are purpose-built for use in regulated financial industries and therefore have been designed to promote financial security and market integrity¹. Our global team of over 350 professionals in 14 countries is supported by over 2,000 technology, financial, and legal experts drawn from our global member base².

R3's DLT platform, Corda, is a scalable, permissioned peer-to-peer (P2P) DLT platform that enables the building of applications that foster and deliver digital trust between parties in regulated markets. While some regulated companies may start out using public blockchains, they soon realize they require capabilities native to a permissioned DLT platform like Corda, including privacy, security, scalability, and ease-of-integration with existing financial systems.

R3 provides services to shorten time-to-market, as well as support and guidance on implementation, integration, and developing ecosystems on our platforms to ensure that our customers derive the greatest value possible from our products. Moreover, our customers and partners have access to a network of leading systems integrators, cloud providers, technology firms, software vendors, corporates, and banks.

We also work closely with some of the world's largest commercial banks, financial market infrastructures (FMIs), and central banks to explore the utility of CBDC, asset-backed stablecoins, and other financial services products. The transparency and security enabled by Corda has driven its adoption among some of the world's most risk-sensitive institutions.

¹ More information on Corda can be accessed here:

<https://www.corda.net/#:~:text=R3's%20Corda%20is%20a%20scalable,between%20parties%20in%20regulated%20markets>.

² More information on R3's work, portfolio, and customers can be accessed here: <https://www.r3.com/about/>

Moreover, R3 shares the priorities of our partners and developers. We focus on building technologies that ensure system security, appropriate risk mitigation, ownership traceability, and the ability to safeguard assets. It was these priorities that led SIX Swiss Exchange to choose Corda as the underlying DLT platform for its digital asset listing, trading, settlement, and custody service named SIX Digital Exchange (SDX)³, as well as Nasdaq's Digital Asset Suite⁴.

These priorities also led the Depository Trust & Clearing Corporation (DTCC), one of the world's more risk-sensitive institutions, to choose R3 as its partner to develop and launch its Project Ion platform. Project Ion, which recently entered production, leverages Corda to process an average of over 100,000 bilateral equity transactions per day, and almost 160,000 transactions on peak days⁵.

Corda has also served as the underlying platform for multiple wholesale and retail CBDC projects by the central banks of Canada, Hong Kong, Sweden, South Africa, Australia, Malaysia, France, Switzerland, and other institutions including the BIS.

Introductory Comments

R3 is generally encouraged by the Second Consultative Document. We commend the Committee for diligently collaborating with a range of stakeholders to develop a framework to bring cryptoassets safely and securely into the banking system – a major and necessary step to modernize the global economy for the 21st century.

We do, however, have serious reservations with one specific proposal included in the Second Consultative Document. The inclusion of a new infrastructure risk “add-on” to cover the perceived “unforeseen” risk of DLT would be needlessly detrimental to an emerging industry and is at odds with the Committee's own stated, core principle of “same risk, same activity, same treatment” and the concept of “technology neutrality” established in the First Consultative Document.

Despite our fundamental concern with this provision, we are otherwise encouraged with the progress the Committee has made following the publication of its First Consultative Document in June 2021.

High-level recommendations

We offer three recommendations in response to the Second Consultative Document:

³ Further information on SIX Digital Exchange is available here: <https://www.r3.com/blog/six-digital-exchange-goes-live-on-r3s-corda/>

⁴ More information Nasdaq's Digital Asset Suite built on Corda is available here: <https://www.corda.net/modal/nasdaq/>

⁵ A press release announcing the launch of DTCC's Project Ion can be accessed here: <https://www.dtcc.com/news/2022/august/22/project-ion>

1. **The Committee should commit to the general principles outlined in the First Consultative Document.** We support the general principles that were set out by the Committee in its First Consultation published in June 2021. These three general principles were:
 - **Same risk, same activity, same treatment:** We fully support this approach and believe it is the most appropriate approach to ensure technology-neutral policies and regulation that fully leverage the potential for innovation.
 - **Simplicity:** We agree with the Committee that banks would benefit from an initially simple framework given the relatively small size of the cryptoasset market.
 - **Minimum standards:** We support the Committee’s approach in setting minimum standards but acknowledge that care must be taken to ensure consistency above the minimum standards to reduce regulatory arbitrage that would undermine the framework the Committee has proposed.
2. **The Committee should not include the proposed infrastructure risk add-on for Group 1 cryptoassets in the framework.** We strongly oppose the inclusion of an infrastructure risk add-on in the first iteration of the framework. This measure, which we discuss in detail later in our response, deviates from the Committee’s stated principle of “same risk, same activity, same treatment.”
3. **We support the revised classification conditions and categories.** These updated conditions and categories represent a marked improvement from the First Consultation. We appreciate the Committee’s recognition of the significant differences between the many types of cryptoassets, including useful clarity on the treatment of Group 1 and Group 2 assets.

We appreciate the opportunity to provide feedback on the Committee’s Second Consultative Document. In addition to the high-level observations above, we offer more substantive feedback below on two key areas that we touched on above: 1) the proposed infrastructure risk add-on and 2) the refinement of the classification conditions.

Infrastructure risk add-on

R3 believes that standards and regulation for DLT should be performance-based and technology-neutral, akin to the Committee’s principles of “same risk, same activity, same treatment” that were set out in its First Consultative Document and reiterated in the introduction of its Second Consultative Document.

R3 supports a risk-based approach to the supervision and regulation of DLT that accounts for the varying magnitude and nature of consequences when considering risk mitigation. We also note that many regulators and central banks around the world agree that regulating a technology itself, rather than a technology’s use or the outcomes of its use, is a blunt instrument that may stifle innovation with little or no positive impact on reducing risk.

For example, in situations where digital assets are merely digital versions of other underlying assets, they should be regulated in the same way as the underlying asset with regards to risk treatment. When considering new categories, unique requirements may be evaluated because of untested risks to consumers, financial institutions, and over financial and monetary stability.

In the First Consultative Document, the Committee stated: “As a starting point, the prudential framework should apply the concept of ‘technology neutrality’ and not be designed in a way to explicitly advocate or discourage the use of specific technologies related to cryptoassets.” This point was referenced again earlier this year when Pablo Hernández de Cos, Chair of the Basel Committee on Banking Supervision and Governor of the Bank of Spain, said that “same risk, same activity, same treatment” is one of the Committee’s high-level principles⁶. Similar sentiments have been expressed by other central bankers, including Deputy Governor of the Bank of England and BIS Committee on Payments and Market Infrastructures (CPMI) Chair Sir Jon Cunliffe. In his speech on lessons learned from the crypto winter, Sir Cunliffe advocated for a “same risk, same regulatory outcome” approach to future regulation⁷.

We were, therefore, not expecting to see the inclusion of the following passage on page 4 of the Second Consultative Document:

“The Committee remains concerned that the distributed ledger technology (DLT) infrastructure on which cryptoassets are based is still new and evolving and may pose various unforeseen risks. The Committee proposes to put in place an add-on to risk-weighted assets that would apply to all Group 1a and Group 1b cryptoassets to cover these unforeseen risks. The proposed calibration of the add-on is 2.5% of the exposure value. The Committee will continue to monitor the evolution of DLT technologies, assessing their risks and benefits. Based on this monitoring work the Committee will, if appropriate, make adjustment to the calibration of the add-on.”

This approach conflicts with the Committee’s original suggestion of technological neutrality – an important and well-established regulatory principle. Furthermore, how the 2.5% figure for the add-on was calculated was not explained and could inadvertently stifle innovation and growth of the digital asset market.

Aside from the importance of the principle of technological neutrality in regulation, we disagree with the Committee’s assertion that DLT “may pose various unforeseen risks.” Some of the world’s most risk-sensitive institutions, including many organizations that operate in highly regulated environments, are adopting DLT precisely because it materially *reduces* risk when compared to outdated, reconciliation-intensive legacy processes.

⁶ Chair Pablo Hernández de Cos’s remarks can be accessed here: <https://www.bis.org/review/r220621c.htm>

⁷ Sir Jon Cunliffe’s remarks can be accessed here: <https://www.bankofengland.co.uk/speech/2022/july/jon-cunliffe-speech-on-crypto-market-developments-at-the-british-high-commission-singapore>

The role DLT is already playing in reducing cost of and risk in the reconciliation process is one example of this. Reconciliation is a highly labor-intensive and error-prone process that plays a large and vital role in banks' day-to-day operations. This notoriously complex process is particularly risky in instances where banks are dealing with large volumes of data. R3's Corda automates and streamlines the risky reconciliation process by delivering an immutable "single source of truth" for multiple parties. Transactions are cryptographically signed and stored only by relevant parties to prevent the leaking of sensitive data.

By way of example, the reconciliation process for interbank transactions in Italy historically consisted of multiple disparate parties relying on manual, outdated process that inevitably resulted in inconsistencies – and, therefore, increased risk. The error-prone work of resolving mismatches in transactions burdened the country's "spunta" process for decades.

To remedy this issue, the Italian Banking Association (ABI) adopted Spunta Banca DLT⁸, a private, permissioned DLT-based project for interbank reconciliation that is powered by R3's Corda Enterprise. This new application streamlines and automates the reconciliation of transactions, improves the governance of the "spunta" process, and accelerates the lengthy settlement process into a real-time management and reconciliation process. In this instance, a private, permissioned DLT network is reducing banks' risk by bringing immutability, security, and a single source of truth to transactions.

Private, permissioned DLT platforms can also reduce risk in the clearing and settlement of securities. The current T+2 settlement cycle introduces a degree of risk that can be reduced via DLT-enabled real-time settlement. In August 2022, the DTCC, the premier post-trade market infrastructure for the global financial services industry, announced its Project Ion platform, which is being developed as a DLT-based alternative to existing services leveraging R3's Corda. Project Ion was designed to adhere to rigorous regulatory standards to deliver the resiliency, volume capacity, security, scalability, and risk controls that the DTCC is known for, with the goal of supporting a netted T+0 settlement cycle. As of September 2022, the Project Ion platform is now processing an average of over 100,000 bilateral equity transactions per day, and almost 160,000 transactions on peak days.

We encourage the Committee to refer to responses to the First Consultative Document that illustrated the risks of a potential infrastructure add-on. The Committee will have seen that respondents to the First Consultative Document alluded to these risks in their responses to Question 8 concerning an infrastructure add-on for Group 1 cryptoassets. Deutsche Börse Group, for example, noted that these assets "need to be addressed from an IT-Security/ Operational Resilience perspective and not necessarily via additional capital requirements in order to help the technology develop" and that the risks are not necessarily linked to DLT's use but are

⁸ Further information on the Spunta Banca DLT solution can be found here: <https://www.r3.com/case-studies/spunta/>

dependent on use-case implementation⁹. In response to Question 5, the ABI stressed the need for an approach that is “as technologically neutral as possible¹⁰.”

As indicated in a 2021 World Economic Forum (WEF) report¹¹, DLT can address “significant challenges” across capital markets stemming from inefficiencies caused by outdated legacy systems. Per the WEF, the use of legacy structures that require organizations to independently maintain siloed records of transactions “adds complexity to operations, increases the risk of error, limits the ability to automate processes and likely adds costs across the capital markets ecosystem.” These are benefits worth harnessing and cultivating.

We believe that the groups of cryptoassets (Groups 1a, 1b, 2a, 2b) in this Second Consultative Document and approaches to risk-weighted asset requirements set out by the Committee for each accurately reflect the relative risk of the assets they encapsulate. For example, the amendments to the tests for Group 1b assets serve to relegate the most risky of those already low risk cryptoassets in Group 1b to Group 2. When considering new categories, unique requirements may be evaluated because of untested risks to consumers, financial institutions, and over financial and monetary stability. We offer more substantive feedback on the classification conditions below.

R3 believes that penalizing a technology itself is counterproductive, and that regulating a technology like DLT in its still nascent stage could be harmful to the global economy and restrict adoption of what is actually a risk reducing technology. We agree entirely with the Committee’s desire to reduce risk, but its efforts to do so should be targeted at how technologies are used within financial services – not the technology itself.

Refinement of the classification conditions

R3 commends the Committee on its approach to developing a set of classification conditions that capture the differences between a range of cryptoassets. We believe that classification conditions, as refined in the Second Consultative Document, are the appropriate approach to ensure a technology-neutral and same-risk treatment framework as discussed above.

R3 broadly supports the revised classification conditions, and believes the prioritization of transferability, settlement finality, risk mitigation, and operational structure, among other things, is essential to ensure the market matures safely.

⁹ Deutsche Börse Group’s response is available here:

https://www.bis.org/bcbs/publ/comments/d519/deutsche_boerse.pdf

¹⁰ The Italian Banking Association’s response is available here:

<https://www.bis.org/bcbs/publ/comments/d519/abi.pdf>

¹¹ “Digital Assets, Distributed Ledger Technology, and the Future of Capital Markets – Insight Report.” The World Economic Forum. May 2021.

https://www3.weforum.org/docs/WEF_Digital_Assets_Distributed_Ledger_Technology_2021.pdf

We support the new distinction between Group 2a and Group 2b assets set out in the Second Consultative Document. We also appreciate the useful clarity provided by the Committee on the treatment of Group 1 and Group 2 assets, as they relate to permissioned and permissionless DLT. In R3's view, a clear distinction between the classification of Group 1 and Group 2 cryptoassets is critical to ensure that each receives appropriate treatment that will encourage innovation while protecting markets and consumers.

As stated in our response to the Committee's First Consultative Document, R3 sees immense potential in Group 1 assets in particular to increase efficiency in financial markets through the tokenization of traditional assets, which we believe are rightly classified as Group 1a assets. As stated above, a range of organizations have built solutions on R3's Corda platform. These solutions include several operational use cases for tokenized traditional assets that integrate with or improve upon legacy banking systems. Some examples follow.

As Committee members will know, a particular challenge facing banks is cross-border payments. Using Corda Enterprise, Wells Fargo built an internal application called Digital Cash¹², which leverages Corda's settlement finality, privacy, and scalability to move value between Wells Fargo institutions across borders using digital representations of cash. By integrating a type of digital asset into its internal operations, Wells Fargo reduced liquidity risk by creating faster intrabank transfers and expanded operating hours.

Another novel use case for tokenized assets relates to private placements, which currently use paper-based legacy systems and result in significant delays for investors. To overcome this challenge and reduce administrative costs, HSBC built the Digital Vault application on Corda. The application tokenizes private placement records, enabling the digitization of the entire asset lifecycle. HSBC pursued this application of an asset-backed token on Corda due to its scalability, privacy, and ease of auditing¹³.

R3 is also heavily engaged in the development of tokenized cash, namely CBDC projects. As Committee members may know, Corda is being used in CBDC pilots in France, Sweden, South Africa, and many other countries, and we are convening public and private thought leaders globally in our Sandbox for Digital Currencies¹⁴.

Although CBDCs are excluded from the Committee's proposal, R3 has observed an overlap in the overarching cryptoasset policy issues. We believe CBDCs and tokenized traditional assets built on distributed ledgers possess extraordinary potential to enhance operational efficiency and reduce risk in the banking industry. Based on this experience, we believe treatment of these assets within existing frameworks is appropriate to ensure innovation can take root, while at the same time preserving adequate protection and risk mitigation measures for banks.

¹² More information on Wells Fargo's cross-border digital cash solution can be found here:

<https://www.corda.net/modal/wells-fargo/>

¹³ HSBC's Digital Vault – a private placement securities solution – can be accessed here:

<https://www.corda.net/modal/hsbc/>

¹⁴ Further reading on R3's digital currency work can be accessed here: <https://www.corda.net/digital-currencies/>

Stablecoins are another promising use-case for tokenized assets, which we are actively exploring in our Sandbox for Digital Currencies. R3 supports the classification conditions for these as Group 1b assets, but ultimately foresees that some popular stablecoins would not meet the conditions in their current form.

Further, we anticipate that banks' Group 2 cryptoasset exposure is likely muted in the short to medium term due to questions and, in many cases, concerns about volatility and risk. During this period, we expect many banks to minimize their exposure to Group 2 assets as they await additional regulatory clarity and observe customer demand. Regardless, a clear distinction between the classification of Group 1 and Group 2 assets remains critical to ensure each receives appropriate treatment.

As currently specified in the Second Consultative Document, we agree with the Committee that it is highly unlikely that cryptoassets based on permissionless blockchains will meet the classification conditions to be included in Group 1.

Moreover, in response to the Committee's question point (1) on page 4, we do not recommend any modifications to the classification conditions in order to permit the inclusion in Group 1 of cryptoassets that use permissionless blockchains.

From R3's perspective we see no technical barriers in the conditions that would prevent digital asset providers from ensuring transferability, settlement finality, and redeemability when they use Corda as the underlying technology. However, we understand that is not true or possible on many platforms.

Conclusion

Overall, R3 appreciates the Committee's thoughtful approach to stakeholder comment and inclusion. We also applaud the Committee's work to refine the classification conditions and for establishing a new cryptoasset classification (Group 2a).

We urge the Committee to remove the proposed infrastructure risk add-on. The inclusion of such a provision runs contrary to the view of most regulators and central banks that regulating (and in this case, penalizing) technologies themselves is a blunt instrument, and not a precise tool needed to safeguard the financial system while cultivating innovation. Furthermore, R3 believes it can demonstrate that the use of DLT in the settings envisaged by the Committee serve to decrease risk when compared with the traditional, and in many cases, outdated platforms currently in use today.

R3 appreciates the opportunity to contribute our response to this important Second Consultative Document and stands ready to serve as a resource as the Committee continues considering these important issues.



Please do not hesitate to contact us with questions or for additional information.

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