

SOCIÉTÉ GÉNÉRALE RESPONSE TO THE BCBS SECOND CONSULTATION ON THE PRUDENTIAL TREATMENT OF CRYPTOASSET EXPOSURES

[Consultative document](#) issued for comment on June 30th, 2022

EXECUTIVE SUMMARY

Société Générale and its regulated subsidiary Societe Generale-Forge welcome the opportunity to comment on the BCBS second consultation on the prudential treatment of crypto-assets and support the urgent need to clarify at an international level the prudential treatment that institutions should apply.

In this respect, the BCBS second consultation is the adequate platform to foster a better understanding of such markets.

While addressing some of the shortcomings identified in the first consultation (2021), some aspects need to be redefined, to first take account of the risks in a proportionate way, commensurate with the applicable Basel rules, and second allow regulated institutions to participate in an appropriate scale in these markets, while enhancing controls and fostering transparency on these assets proposed to a wide range of public.

The second BCBS consultation on the prudential treatment of crypto-assets, while showing some progress compared to the first consultation last summer, tends to disadvantage the participation of banks in the crypto-asset markets, and risks cementing control of these markets to non-banking players through excessively burdensome requirements, and as a result depriving banking regulators of a rigorous and iterative analysis, review and supervision of crypto-asset activities. While promoting sound practices that could in the medium term enhance transparency and risk controls on these markets, the proposed prudential treatment would impose the burden on banks alone.

The BCBS text, in its current state, could prove prohibitive with respect to digitalization experiments on DLTs in the banking world, such as the public blockchain-based financial instruments issuance made in 2021 by the European Investment Bank (EIB) with the help of Societe Generale as joint lead manager and of Societe Generale-Forge as registrar and settlement agent, under the constant and demanding oversight by relevant financial and prudential regulators.

In addition, the taxonomy proposed by the BCBS is based on overly restrictive conditions for the classification of crypto-assets, including traditional financial instruments issued on blockchain/distributed ledger, which, far from allowing a clear classification, will shift a majority of products to the lower categories associated with the higher capital charges, hampering in practice banks from experimenting and investing in these markets.

Specific add-ons ("infrastructure" capital surcharge on Group 1 crypto-assets, 1% Tier One limit on Group 2 gross exposures) are also proposed, introducing potential deviations from the current Basel prudential framework.

Finally, the framework should acknowledge and accommodate the development of regulatory frameworks for digital assets, such as MiCAR and the Pilot Regime in the European Union. These aim to provide a balanced legal framework for issuance and activities relating to crypto-assets and propose a clear taxonomy of crypto-assets (notably distinguishing financial instruments issued on DLT covered by the traditional MiFID financial regulations and new kinds of crypto-assets covered by the new MiCAR regulation), which will enhance control and transparency on both the service providers and the assets.

CLASSIFICATION CONDITIONS

The characterization of crypto-assets as Group 1 assets should only be based on the legal characterization of an asset and the feasibility to comply with regulatory requirements under applicable law (of the issuer and/or the relevant service providers), and not on technological grounds. In many jurisdictions, including OECD countries, securities laws have been adopted to ensure the same legal definition to issuances and trading of unlisted securities on either permissionless or permissioned blockchain technology (France, Germany, Luxembourg, etc.).

As such, **permissioned assets, applications and services built on permissionless DLT should be eligible to Group 1 assets**, provided that an appropriate governance is set up : (i) the ownership of assets abides with applicable contract law and is covered by a continuity plan in case of a technological event (major blockchain disruption, etc.), (ii) transactions are strictly defined, tracked, controlled and legally binding, (iii) whitelisted actors are authorized (by the issuer under the issuance documentation and/or by applicable regulation) to validate transactions *ex ante* before their registration on the blockchain, independently of the underlying technology (permissionless blockchain or permissioned) chosen.

As an illustrative example, a permissionless DLT was experimented in 2021 by Societe Generale-Forge on the issuance of digital bonds by EU supranational EIB on the Ethereum permissionless DLT and its settlement by a digital representation of euro also realized through the same permissionless DLT:

In April 2021, the European Investment Bank (EIB) issued digital bonds (EUR 100M, rated Aaa/AAA/AAA) using the Ethereum permissionless blockchain technology, in collaboration with Banco Santander, Goldman Sachs and Societe Generale as joint lead managers. Societe Generale Forge was mandated as registrar and settlement agent.

The EIB digital bonds have been clearly defined in the issuance documentation as bonds in dematerialized form, issued in fully registered form ('nominatif pur') in a permissionless blockchain under French law, conferring the same legal rights of ownership as bonds issued in book-entry form. The issuance was settled in a digital representation of the euro (wholesale CBDC) issued by the French central bank (Banque de France).

While the underlying blockchain technology is permissionless, the EIB bonds are permissioned tokens: in addition to allowing the whitelisting of SG Forge as the issuer's registrar and settlement agent, the smart contract allows an ex-ante validation of any potential transfer of property realized on the blockchain, preventing peer-to-peer transfers of EIB bonds from occurring without the prior approval of the issuer and/or its agent.

In addition, for risk management and regulatory purposes, Societe Generale-Forge has put in place a business continuity plan, including notably an external data retention system, to keep an 'off-chain' monitoring of the EIB bonds holders' positions available at all times and to mitigate any potential technological issue.

This experiment took place under a constant dialogue with relevant financial and prudential regulators, who exerted oversight of the operation. Please refer to the appendix for further details.

In this respect, **stablecoins issued by a prudentially regulated and supervised entity should be exempted from the basis risk and redemption risk tests** as proposed by the BCBS, because the level of risk associated with these assets is lower than those issued by non-regulated entities. In this respect, stablecoins issued by regulated banks, in many ways similar to a secured claim, should benefit from the same regulatory treatment as other financial claims on banks. This approach would recognize that exposures to regulated banks in the form of crypto-assets pose the same risks as traditional exposures and would alleviate the management of constraints, namely in the form of the basis risk and redemption tests.

In the same vein, banks should not be subject to the proposed risk management conditions set on all involved entities (under conditions 3 and 4), which could prove difficult to assess and keep record of on an ongoing basis, in part because the consultation does not specify what due diligences are expected on such stakeholders.

Finally, the framework should **ensure a clear and stable classification of assets. As currently proposed, classification of assets as Group 1b or Group 2a could prove difficult**, given the strict and stable conditions imposed. Conditions for the classification are based on factors that might be difficult for banks to verify on an ongoing basis. Under the proposed framework, any change in the underlying technology, intermediary or technical actor (validators, etc) could trigger a downgrade of Group 1b assets to Group 2a, while market conditions on Group 2a assets could also entail an unanticipated reclassification to Group 2b.

PRUDENTIAL TREATMENT

Foremost, the elaborate safeguards of the Basel prudential framework ensure a sound and safe prudential environment for banks. In this respect, **existing Basel standards should be applied with as few deviations as possible to the crypto-assets**, to ensure a clear and consistent approach. In particular, the eligibility of Group 2a assets to the internal model approach should be revisited when and where sufficient data becomes available, and should be allowed appropriate netting between exchanges. In the same vein, the liquidity treatment of Group 1b with underlying HQLA should be specified, and the validity of liquidity inflows under the form of CBDC should be recognized.

The specific infrastructure add-on, resulting in a capital surcharge of 2.5% of the exposure, on Group 1 is excessively conservative and lacks evidence-based justification. The use of DLT could lower the level of operational risks in institutions and improve the quality of transactions, as demonstrated by current experiments on CBDC for example. Other experiments in the financial sector, such as the integration of the DLT to streamline processes, offer new solutions of investments in digital assets. As such, Societe Generale Securities Services is beginning to offer custody, valuation and liabilities management services to asset managers and funds. Consequently, **this add-on should correspond to a clearly stated and identified additional risk, which is clearly not the case on Group 1a assets, and not proven on Group 1b**, given the strict conditions imposed on them. Although the BCBS has expressed an intention to review the proposed add-on over time, it does not seem to be conducive to the development of these new technologies, in particular when it applies to group 1a assets which can be assimilated to traditional assets in terms of risks.

The Group 2 exposure limit, calculated on a gross exposure, and capped to 1% of a given institution Tier 1 at all times, should be reviewed and recalibrated. Applying specifically to Group 2 crypto-assets on technological grounds, it deviates radically from other exposure limits in the Basel framework, both in its calculation (neither the CRM nor the long/short offset are recognized) and in its very low level (the large exposure limit, including on shadow banking entities, is set at 25% of Tier 1 capital, G-SIB being subject to a 15% limit in the Basel framework). Moreover, the strict ongoing conditions sustaining the Group 1b classification make a reclassification to Group 2a highly probable, if not inevitable, and consequently increases the uncertainties on the monitoring and anticipation of this limit, with an extremely dissuasive penalty associated with breaches of this limit. As currently proposed, it does not promote sound risk management, since, when this limit is exceeded, a penalty applies to the entire position. In practice, banks will need to stay well below the exposure limit, for fear of not being able to absorb or anticipate a breach.

As a conclusion, while the banking sector's exposure to crypto-assets is today relatively modest, the Group 1 add-on and Group 2 exposure limit as currently proposed are likely to severely curtail banks' participation in the crypto-assets market, at the risk of (i) leaving crypto-assets in the hands of lightly regulated to unregulated actors, and (ii) leaving behind banks in this growing market, with considerable and potentially irrecoverable delays in investments for research, development and experiments in these fields.

In the EU, substantial regulations such as the "Pilot Regime", allowing the issuance and trading of blockchain-based listed financial instruments on trading venues, and the MiCAR Regulation, for stablecoins, e-money tokens and utility tokens crypto-assets issued, stored and transferred on a DLT that do not qualify as financial instruments, will open up opportunities for regulated institutions for efficiency improvements in trading and post-trading processes, and ensure consumer protection and financial stability. The capital framework should be designed so that European banks are allowed to take part in the market under these new regulations to help them scale-up appropriately and in a well-regulated environment, to secure them and launch new experiments, with a similar framework as non-bank intermediaries.

Société Générale

Societe Generale, one of Europe's leading financial services groups and a major player in the economy for over 150 years, supports 25 million clients every day with more than 117,000 staff in 66 countries. Our Group draws on our European roots to develop our business internationally. Our unique geographic positioning enables us to connect Europe and Africa with major global financial centers in Asia and the Americas. The Group combines financial strength, proven expertise in innovation and a sustainable growth strategy with the objective of creating value for all our stakeholders. We seek to be a trusted partner in the projects of those building tomorrow's world today.

This commitment guides our mission: to protect and manage assets and savings, finance projects, protect clients in their both their day-to-day lives and in their professional activities, ensure secure transactions and offer the best technological solutions.

Société Générale Forge

Societe Generale – FORGE is a fully integrated subsidiary of Societe General Group, regulated as investment firm under EU MiFID2 regulation. The company is an active member of the financial trade associations AMAFI and ICMA and of the digital asset association ADAN, and member of the digital asset working groups of the AFME and Paris Europlace.

We provide issuers and investors, either Corporates or Financial Institutions, with end-to-end services to issue and manage digital-native financial products registered on the blockchain (Security Token). For market infrastructure operators we build open, simple, secure and institutional-grade frameworks and models for Security Token operations, underpinned by banking class security and full regulatory compliance. Committed to launching with real use cases, Societe Generale – FORGE is progressively building its 'compliant by design' platform capabilities.

APPENDIX

Illustrative example – The European Investment Bank issuance of digital bonds on the Ethereum public blockchain (April 2021)

The European Investment Bank (EIB) is the lending arm of the European Union. The EIB is the biggest multilateral financial institution and has delivered a total of EUR 95 billion in financing in 2021 alone. The EIB works with other EU institutions to foster European integration, promote development in the European Union and support EU policies.

Fostering market developments in the digitalization of capital markets and paving the way for market participants to adopt blockchain technology for the issuance and trade of financial instruments, the EIB issued in April 2021 its first ever digital bond on a public blockchain. Made in collaboration with Goldman Sachs, Santander and Societe Generale, the EUR 100m 2-year bond issuance, placed with key market investors, represented the first multi-dealer led, primary issuance of digitally native tokens using public blockchain technology. The project has been selected by Banque de France as part of its Central Bank Digital Currency (CBDC) experimental projects.

This product (ISIN FR0014003521) has generated more than 15 transactions to date, with top-tier investors buying it to onboard on this digital journey.

How did the issuance work ?

On 28 April 2021, the EIB issued a digital bond, governed by French Law, on a blockchain platform. The full issuance and registration of these digital bonds were made on the Ethereum permissionless blockchain. This EIB issuance was rated *Aaa/AAA/AAA* by credit agencies, which did not discount it for any additional risk when compared to “traditional” EIB bonds.

In a partnership with Banque de France, the payment of the issue monies from the underwriters to the EIB has been represented on the blockchain in the form of a wholesale CBDC, i.e. a digital representation of euro on the Ethereum permissionless blockchain.

The EIB mandated Banco Santander, Goldman Sachs and Societe Generale as joint lead managers for the securities’ placing. Societe Generale-FORGE, a regulated subsidiary of Societe Generale, has been mandated as joint structuring manager, registrar and settlement agent, and as such validated *ex ante* the compliance controls (KYC, AML, sanctions and embargoes) for all securities transactions on the blockchain before their effective technological registration on the permissionless blockchain.

How was the issuance made legally and technologically secure?

The booking was performed exactly like a traditional bond, with the notable exception that no central security depository (CSD) was needed for this experiment: the EIB bonds were issued directly on a public blockchain (Ethereum) as a “native token”, and were legally characterized under French Law as MiFID2 financial instruments, and more specifically as bonds issued in fully registered form (*‘nominatif pur’*) in a permissionless blockchain, conferring the same legal rights to bondholders as bonds issued in book-entry, and with the transfer of ownership of the EIB bonds performed by the transfer of the tokens within the blockchain.

With the objective of facilitating risk management and compliance in line with traditional securities market practices, the EIB bond issuance was structured according to the CAST (Compliant Architecture for Security Tokens) framework. In addition to the whitelisting of the issuer’s agents (registrar and settlement agent), preventing non-identified actors to intervene on the transactions, the smart contract of the bonds included a function requiring that any transfer of financial securities between the issuer and investors and between two investors (strictly identified within legal documentation as well as by their two own addresses, known by the issuer and/or its agents) be validated by one or several agents acting on behalf of the issuer, i.e. the registrar and the settlement agent, based on banking-grade KYC, AML and sanctions and embargoes controls. Transactions on the EIB digital bonds are therefore based on

permissioned services by regulated entities enabled on DLT-based permissionless securities. This *ex ante* validation of any transaction on the permissionless blockchain makes it possible, **independently of the underlying technology**, to verify that the future owner of the tokenized traditional securities is duly identified and checked (KYC/AML, sanctions-embargoes, etc.) before the effective completion of the transaction.

Due diligence in terms of regulatory obligations, and notably financial crime (KYC-AML, freezing of assets, embargoes and sanctions, etc.), has been realized while using a permissionless technology as golden source for the registration of property transfer.

Finally, with this experiment, the settlement was successfully carried out using a wholesale version of Central Bank Digital Currency (CBDC) on a blockchain, under the Banque de France experimental ecosystem. From a technological standpoint, the experiment required the development and deployment of smart contracts under secured conditions, ensuring that CBDC tokens were safely issued and controlled, and that CBDC transfers occurred simultaneously with the delivery of securities tokens to the investors' portfolio, in a Delivery versus Payment, without requesting the intermediation of neither a CSD nor Target-2 Securities (T2S).

What were the benefits for the issuer?

According to the EIB press release on such issuance, “the digitalization of capital markets may bring benefits to market participants in the coming years, including a reduction of intermediaries and fixed costs, better market transparency through an increased capacity to see trading flows and identity asset owners, as well as a much faster settlement speed.” Added value for both issuers and investors has consisted in fewer intermediaries, a much faster settlement speed (T0), and the possibility for investors to read their positions directly on the blockchain on a 24/7 basis without intermediation.

The role of issuer's agent for the registration of the bonds in a smart contract (i.e. registrar), based on Societe Generale-FORGE capabilities, enabled the issuer and dealers to transfer EIB bonds in a safe manner and to be informed of the events related to the EIB bonds during their lifecycle. As an example, noteholders were recently informed of the occurrence of a significant technical upgrade on the Ethereum blockchain (“The Merge”), on which the EIB bonds were issued, realized on 15 September 2022, as announced by the Ethereum Foundation. Besides, for risk management and regulatory purposes, Societe Generale-FORGE has, according to French Law, put in place a business continuity plan, including notably an external data retention system, to keep at all times an ‘off-chain’ monitoring of the EIB bonds holders' positions and mitigate any potential technological issue.

On the secondary market, liquidity was limited to OTC transactions and a few counterparties technically equipped. Nevertheless, a cross-border collateral upgrade repo was subsequently booked using the DLT with a German asset manager. This was the first time a digital bond was borrowed on a blockchain, collateralized on a triparty agent and backed by a traditional contractual setup.

The EIB digital bonds experiment is still live, with ongoing OTC transactions on the secondary market, and transactions can be visualized by all bondholders directly on the Ethereum blockchain (via Etherscan, a node, etc.). These capabilities of public blockchains brings a central registry ‘on-chain’, accessible by everywhere, whilst remaining anonymous, which reduces massively reconciliations between capital market participants.

What conclusions can be drawn from this pioneering experiment?

The EIB digital bond issuance on a permissionless blockchain is significant of iterative experiments by financial institutions based on regulatory reforms on blockchain-based securities. Since 2018, an equivalency of rights between a registration of securities in a book-entry form and a registration in a blockchain is recognized in France, and since then in Luxembourg, Germany and soon in the EU through the “DLT Pilot Regime”. After the substantial move from paper-based securities to dematerialized securities since the 1980s in France, and more recently in Germany, the use of DLTs could be the next step of securities digitization and processing automation. Financial institutions and regulated actors are and will remain a major part of innovation in this area.