Aurexia

ASIA PACIFIC REGULATORY WATCH





Foreword

We are pleased to release this latest issue of Aurexia's Asia Pacific Regulatory Watch newsletter, covering the latest regulatory developments in Singapore and Hong Kong:

1) MAS recommendations on AML/CFT name screening

The MAS conducted thematic inspections on selected FIs' name screening processes, based on the requirements of MAS Notice 626/1014/8242. Our article summarizes the areas for improvement and good practices identified by MAS.

2) MAS' global CBDC challenge

Nine countries have already launched Central Bank Digital Currencies (CBDCs) and several are testing the technology. The MAS sees "no urgent need" for a CBDC in Singapore. However, a Global Challenge was launched in 2021 to study how the technology could be implemented.

3) SFC's climate risk management requirements come into effect

In 2021, the SFC set out its expectations on how the c. 2,000 asset management firms in Hong Kong assess, disclose and manage climate risks exposure. These requirements come into force as early as August 2022.

4) MAS consultation on revised Pillar 3 disclosure requirements The MAS has been among the frontrunners in adopting the finalised Basel III capital requirements and subsequently issued the draft "public disclosure requirements for regulatory capital for Singapore-incorporated banks" in March 2022.

5) RegTech corner - Manaos

In this issue, we introduce a new section – the RegTech Corner – where we present selected RegTechs' solutions. In this issue, we feature the ESG RegTech Manaos for which we have interviewed Sebastien Messéan, the General Manager.

If you would like to discuss any of these or other regulatory topics with us, please do not hesitate to contact us!



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Start of 'Aurexia Sustainable': We are strengthening our global ESG & Sustainable Finance proposition



'Aurexia Sustainable' is our new label dedicated to sustainable finance under which our ESG experts in Europe and Asia join forces to support our client globally and locally with their initiatives and challenges in their sustainability journey.

"ESG has been a hot topic for many years, and Aurexia has helped a number of banks and asset managers put their ESG agenda into practice. As international standards and best practices evolve and ESG regulations and expectations converge around the world, we are creating this global label to maximize the value we bring to our clients, the environment, and societies around the world", says Dominique Herrou, Aurexia's cofounder.

The 'Aurexia Sustainable' team closely observes the latest developments, trends, and evolving standards and regulations in sustainable finance to assess the impacts for asset managers, banks, CIB, finance and risks divisions.

We also keep an eye on developments in the ESG data and solutions market. This allows us to help our clients navigate the complex and growing ESG ecosystem, assess and select the right solution for their needs.

Feel free to reach out to our global and local Sustainability Leaders to discuss your current ESG challenges and how we can help you address them:

- Global & France: Colombe N'zoré
- Luxembourg: Alain de Cidrac
- United Kingdom: Manmeet Rana
- SG & HK: Sebastian L. Sohn



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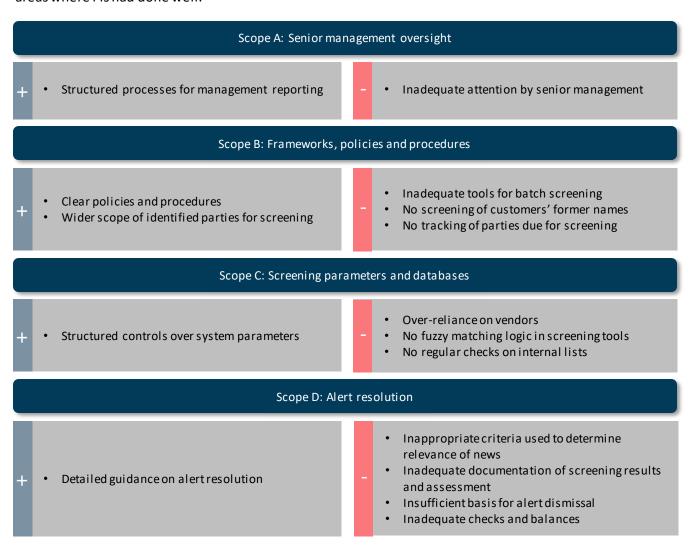
AML/CFT Name Screening Practices in a nutshell



Observations, good practices and supervisory expectations

In 2021, MAS conducted thematic inspections to assess the robustness of selected mid-size and small FIs' name screening frameworks and controls, relative to their risk profiles and business operations in Singapore. The observations were then published in an information paper in April 2022.

MAS scoped the inspection into 4 areas with summaries and case studies of areas for improvement and areas where FIs had done well.



Review and adopt best practices

Name screening is a critical part of the AML/CFT process of FIs. Inadequate screening processes and procedures may allow unintentional breaches to occur. FIs should study and adopt best practices to safeguard themselves against AML/CFT incidents.



Digital Currencies in Singapore



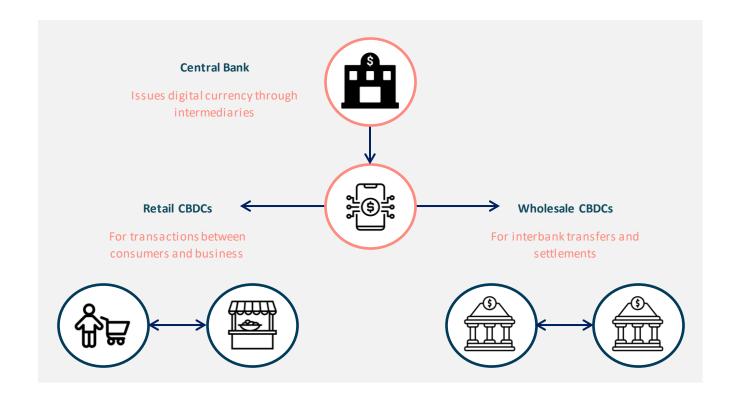
Getting ready for Central Bank Digital Currencies

Globally, Central Bank Digital Currencies (CBDCs) have been launched in 9 countries, while at least 35 other countries are studying the technology in pilot stages. There are various benefits of having a CBDC, such as being more cost efficient than physical cash. However, a **regulatory framework** is required to ensure implementation of the technology does not compromise privacy standards and other concerns. While the Monetary Authority of Singapore (MAS) has indicated there is "no pressing need" for a CBDC in Singapore, a Global Challenge was launched in 2021 to study possibilities, and a project has been embarked on to outline a potential infrastructure for a CBDC.

What is a CBDC?

A CBDC is a form of **digital money issued by a nation's central bank** backed by the creditworthiness of the government.

Presently, there are two types of CBDCs, **wholesale** and **retail**. Wholesale CBDCs are intended for the settlement of interbank transfers and related wholesale transactions, while retail CBDCs are used by individuals to pay businesses, shops, or each other (from a consumer's perspective, it could be similar to existing common forms of digital payments).





Benefits for Central banks, and Impact to Financial Institutions



Benefits for Central Banks

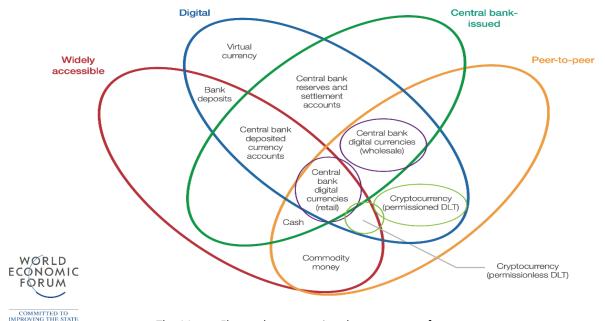
While introducing a CBDC is not a high priority consideration for every central bank, its benefits such as being more **cost efficient** than physical cash, cannot be ignored. CBDCs may provide a **safe** and **liquid** government-backed way of payment that does not even require individuals to hold a bank account. Thus they can help promote **financial inclusion**, i.e. those who are unbanked can get easier and safer access to the system of digital money.

A CBDC also eliminates rare but impactful risks of events like bank failures or bank runs. High cross-border transaction costs can be lowered by reducing complexity of settlement, clearing and routing systems and increasing interjurisdictional cooperation between governments. There are several other benefits of a CBDC for central banks such as the monitoring of real time transactions and statistics, a smoother introduction of negative interests rates, as well as the implementation of monetary policies, actions and measures when required.

Impact on Financial Institutions

While CBDCs can establish a direct connection between consumers and central banks, it is not an entirely new payment system in terms of processes required to set up accounts and clear transactions.

Current practices such as **AML/KYC** will still apply to onboarding processes, financial institutions would still **process payments** and **maintain deposits**. However, these and other related processes will need to be adapted and streamlined. IT systems and infrastructures need to become capable of processing CBDC.



The Money Flower demonstrating the taxonomy of money.

Adopted from the WEF's White Paper "Central Banks and Distributed Ledger Technology" Nov 2021



Other issues for consideration



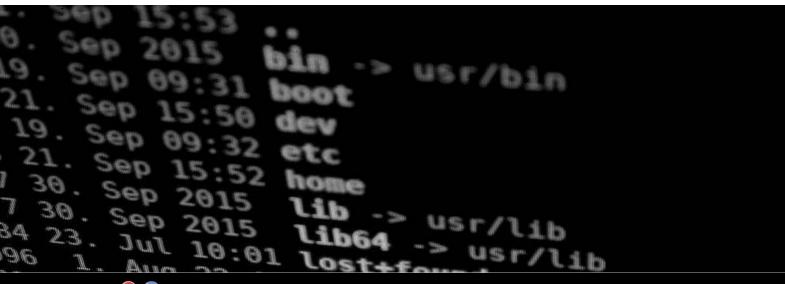
Potential risks and challenges

Financial and cyber security are areas of concern for all types of crypto assets. When Diem (formerly known as Libra) was first proposed by Meta Platforms, the project generated backlash from several government regulators. The US regulators for example raised concerns of how Diem would manage **money laundering, consumer protection** and **financial stability** issues. Crypto assets have been targeted by hackers, fraudsters and thieves. We can expect CBDCs to raise similar questions and attract attention as targets of criminal activities. Robust measures to prevent loss of **assets** and **data** and ensure resilience of the IT infrastructure will be required.

User privacy is another noteworthy consideration. Apart from the need to prevent potential data breaches, deliberation must also be paid to governments' and central banks' **access** to and **use** of the **data**, in particular in contexts where authorities monitor CBDCs for financial crimes. In Singapore, discussions around the introduction and use of the TraceTogether application and its data (which facilitated contact tracing during the COVID-19 pandemic) illustrate some end-users' concerns with data access and use by the government.

Current **regulatory processes**, both locally and globally, may be impacted and regulatory requirements need to be updated to deal with the new forms of money. Establishing a **regulatory framework** around CBDCs would also require consideration of consumer protection and monetary or financial stability. There are other challenges in introducing a CBDC, such as likely impact on existing **financial markets and structures**, e.g. investments, interest rates or financial services.

Following findings from the Global CBDC challenge, MAS has initiated Project Orchid to build the **technology infrastructure** and **technical competencies** necessary to issue a digital Singapore dollar should Singapore decide to do so in future.





The future of CBDCs



CBDCs in the near future

Digitalizing payment flows is not a new challenge as many countries have also been working on improving existing (retail) payment systems. In Singapore, for instance, the electronic transfer and payment services FAST and PayNow were launched in 2014 and 2017 respectively, facilitating digital payments.

Nine countries have now **fully launched** a digital currency and fourteen countries are in **pilot stages** of their CBDCs while preparing a possible full launch. CBDCs are potentially the next generation of (digital) money and are likely to **co-exist with cash** rather than fully replace it. The MAS is currently exploring the technological infrastructure and technical competencies necessary for CBDCs. Policies would eventually follow through with the **regulatory supervision** needed to guide and govern the technology's implementation.

How FIs can prepare for CBDC

Despite the ambiguity on how central banks around the world eventually deploy and implement CBDCs, Financial Institutions should **develop a view** on how CBDCs could potentially **impact** their business and how they could respond to CBDC-related **opportunities** and **risks**.

Considerations for Financial Institutions' CBDC preparation (non-exhaustive)

Legal / Regulatory Framework



- News tandards for impacted services (i.e., international trade and retail payments)
 will emerge
- Privacy regulations will further evolve locally and globally
- Risk management and capital requirements for CBDC transactions and holdings

Strategy & markets



- Banks may have a role support the facilitation of customer a daptation of CBDCs and potentially in transactions
- Fees and margins may be affected by the introduction (and client acceptance) of CBDC
- Opportunities for new products or service a round CBDC may a rise

IT/Data Infrastructure



- Interfaces to (potentially multiple) CBDC networks/architectures needed
- Investments in ITs ystems and system changes to enable processing of digital currencies may become necessary
- Management of operational and cyber risks likely to become more important



The Hong Kong SFC expect fund managers to consider climate-related risks



SFC requirements on climate-related risks effective in August

Background

Under Hong Kong's green and sustainable finance policy agenda, the Securities & Futures Commission of Hong Kong (SFC) launched a "Consultation Paper on the Management and Disclosure of Climate-related Risks by Fund Managers" in October 2020. The paper proposed new requirements applicable to Hong Kong-based SFC-licensed fund managers (type 9 licensed fund manager managing CIS with investment discretion) who are required to consider climate-related risks in their investment and risk management processes and make appropriate disclosures to meet investors' growing demand for climate risk information and to combat greenwashing.

In August 2021, the SFC published the <u>consultation conclusions</u> and issued the final set of upcoming amendments to the Fund Manager Code of Conduct (FMCC) to introduce the new requirements, together with a circular to licensed corporations on the management and disclosure of climate-related risks by fund managers (<u>Climate-related Risks Circular</u>). The circular sets out the expected standards for complying with the new FMCC requirements in four areas: governance, investment management, risk management and disclosure. Fund managers are expected to be compliant from August 2022 onwards (some parts become effective in November).

Scope and applicability

The SFC adopted a two-tier approach for the applicability and scope of the requirements:

- (i) baseline requirements for all fund managers, and
- (ii) **enhanced standard** for large fund managers (only Fund Managers managing Collective Investment Schemes (CIS) which equal or exceed HK\$8 billion in terms of fund assets for any three months in the previous reporting year).

The requirements apply to fund managers that have discretion over investment management processes. Where funds managers delegate the investment management function to a sub-manager or advisor, they retain the ultimate overall responsibility for complying with the SFC's requirements. Discretionary account managers are out of scope under the new FMCC requirements.

Fund managers need to assess the applicability of the requirements and incorporate the baseline and, if applicable, enhanced standard into their **governance**, **investment management and risk management framework and processes**. Fund managers who are Responsible for the Overall Operation of the Funds (ROOF) are also required to make climate-related risk disclosures.



Requirements in a nutshell



The Securities and Futures Commission (SFC) expects managers of Collective Investment Schemes (CIS) to take risks related to climate change into consideration. This applies to investment and risk management processes, and fund managers will need to implement disclosure requirements to meet investors' growing demand for climate risk information and to combat greenwashing. Fund managers must be compliant from August 2022 onwards.



1. Governance

Board:

- Define the board's or the board committee's role in overseeing climate risk management;
- Oversee progress against goals for addressing climate-related issues; and
- Determine how the board or the board committee executes this role including the process and frequency by which the board is informed about climate-related issues.

Management:

- Assign roles and responsibilities for managing climate-related risks to management level positions or management committees which report to the board or the board committee, and determine the appropriate management structure;
- Establish a process to monitor the status and progress of efforts to manage climate -related risks;
- Assign sufficient human and technical resources for the proper performance of the duty to manage climate-related risks (e.g., staff training, subject experts and climate-related data from external sources);
- Establish satisfactory internal controls and written procedures to ensure compliance with internal policies and procedures as well as regulatory requirements; and
- Set goals for addressing climate-related issues and develop action plans.



2. Investment management

- Identify relevant and material physical and transition climate-related risks for each investment strategy and fund managed;
- Factor material climate-related risks into the investment management process; and
- Assess the impact of these risks on the performance of underlying investments.



Requirements in a nutshell





3. Risk management

- Take climate-related risks into consideration in risk management processes;
- Identify, assess, manage and monitor the relevant and material climate-related risks for each investment strategy and fund being managed; and
- Apply appropriate tools and metrics to assess and quantify climate -related risks.
- If climate-related risks are relevant and material to an investment strategy or if a fund is managed by a Large Fund Manager (with AUM of more than HK\$8 billion), requirements from the enhanced standards apply:
 - Assess the relevance and utility of scenario analysis in evaluating the resilience of investment strategies to climate-related risks under different pathways;
 - If the assessment result is deemed to be relevant and useful, develop a plan to implement scenario analysis within a reasonable timeframe;
 - If climate-related risks are assessed to be relevant and material, identify the portfolio carbon footprints, incl. Scope 1 and 2 greenhouse gas (GHG) emissions from the CIS' underlying investments and define the calculation methodology and assumptions.



4. Disclosure

- Describe the governance structure of the Fund Manager, the roles of board and the management;
- Disclose the steps taken to incorporate climate-related risks into the investment management process;
- Describe the processes for identifying, assessing, managing and monitoring climate-related risks, including the key tools and metrics used.
- Review disclosures at least annually, update them when appropriate and inform fund investors of any material changes as soon as practicable.
- Large Fund Managers are further subject to enhanced standards:
 - Describe the engagement policy and illustrate how material climate-related risks are managed at the entity level;
 - Disclosing the engagement policy at the entity level and implementation, as well as the portfolio carbon footprints of the Scope 1 and Scope 2 GHG emissions associated with the funds' underlying investments at the fund level, the calculation methodology, underlying assumptions and limitations, and the proportion of investments which are assessed or covered.



Implications for fund managers



Timeline

Large fund managers will need to comply with the baseline requirements from 20 August 2022 onwards, the requirements of the enhanced standard become effective in November 2022.

Deadline for other fund mangers' compliance with baseline requirements is 20 November 2022. The enhanced standard is not applicable to this group.

Requirement	Large Fund Managers	Other Fund Managers
Baseline	20th August 2022	20 November 2022
Enhanced	20th November 2022	Not applicable

Implementation approaches

In light of the upcoming deadlines in August and November this year, impacted organizations should review their compliance with the new SFC requirements on dimate-related risks and address potential gaps as early as possible. For the assessment and implementation of these requirements, we recommend a four-step approach:

The first step comprises of an initial gap analysis on the governance structure and framework, followed by an assessment of the climate-related risk exposure on a fund level. Subsequently, tools and procedures for the measurement and management of these risks as well as portfolio emissions need to be implemented. Lastly, fund managers need to prepare reporting on this as part of their mandatory disclosure.



1 - Identify and perform gap analysis of governance structure and risk management framework and incorporate SFC's requirements



2- Assess and determine the relevance and materiality of climate-related risks for each fund

- Implement measurement and management of climate-related risks; develop tools and procedure and consider e.g. using scenario analysis



4- Develop a strategy and approach for disclosure on climaterelated risks; determine the disclosure of portfolio emissions (enhanced standards)



Implications for fund managers



Challenges

While numerous funds have been considering ESG aspects in their investment strategy and management, the SFC requirements go beyond that:

- They require an active measurement and management of climate-related risks and, for large fonds,
 even the full disclosure of portfolio emissions.
- Fund managers will need to determine the applicable requirements and develop individual approaches
 to address them, taking the characteristics of their strategy and portfolios into account.
- The availability and quality of data (typically provided by investees or third parties) will be an obstade for some types of portfolios and companies.
- This holds true for methodological challenges as well.
- Lastly, firms need to assign sufficient resources to absorb potential additional efforts required to fulfil
 the requirements.

Fund managers should act sooner rather than later and **balance business and regulatory requirements in their approach** to managing climate-related risks.



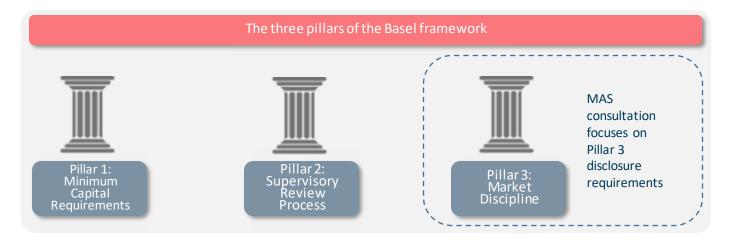


MAS consultation: Adjusting banks' disclosure requirements (Pillar III)



The adoption of Basel III framework in Singapore

Under the Basel Framework (Basel Committee on Banking Supervision), Pillar 3 aims to enhance market discipline through effective disclosure, complementing Pillar 1 (minimum capital requirements) and Pillar 2 (supervisory review process). The adoption of the finalized Basel III framework in Singapore therefore requires corresponding revisions to the existing local Pillar 3 requirements for which the MAS conducted a consultation that ended on 29 April this year.



Recap: The Basel III framework in Singapore

Objectives of the finalised Basel III reforms include but are not limited to:

- Enhancing the risk sensitivity of the standardized approaches;
- Constraining the use of internal model approaches, including introducing a revised output floor based on the revised standardized approaches;
- Enhancing the measurement of the leverage ratio.

MAS has already proposed to **revise the capital requirements** for Singapore-incorporated banks to align with the Basel III reforms, and to implement these revisions from 1 January 2023.

In May 2019, MAS released the first <u>consultation paper</u> to seek feedback on Basel III requirements at national discretion. <u>Responses</u> to the feedback received were published in 2020 and 2021. The papers set out the proposed adoption of **credit risk, operational risk and leverage ratio requirements** in Singapore. Other Basel III components such as the revised large exposure limits and the standardized approach to counterparty credit risk (SA-CCR) have already become effective.



Reflecting the revised Basel III capital requirements in banks disclosure



The Pillar 3 disclosure requirements are subsequently being changed to align with the revised capital requirements. Key changes affect in particular:

- Sub-division 2: Overview of Key Prudential Metrics, Risk Management and RWA
- Sub-division 3: Linkages between Financial Statements & Regulatory Exposures
- Sub-division 4: Credit Risk
- Sub-division 5: Counterparty Credit Risk
- Sub-division 6: Securitisation
- Sub-division 7: Market Risk
- Sub-division 8: Operational Risk
- Sub-division 9: Interest Rate Risk in the Banking Book (IRRBB)
- Sub-division 12: Leverage Ratio
- · Sub-division 14: Asset Encumbrance
- Sub-division 15: Credit Valuation Adjustment Risk

The following pages provide an overview of the proposed revisions.





Proposed key changes to banks disclosure requirements



In the wake of the adoption of the finalized Basel III framework, MAS proposes the following changes to the Pillar 3 disclosure requirements (MAS Notice 637) and sought banks' feedback by 29 April 2022.

https://www.mas.gov.sg/publications/consultations/2022/consultation-paper-on-draft-public-disclosure-requirements-for-regulatory-capital

Key changes to the Specific Disclosure Requirements (Division 3)

Sub-division 2: Overview of Key Prudential Metrics, Risk Management and RWA

- The consultative paper proposes the introduction of two fixed-format tables comprising the comparison of modelled and standardised RWA at risk level (quarterly disdosure frequency) and for credit risk at asset dass level (semi-annual disclosure).
- These tables are mandatory for banks using non-standardised approaches and present the quantification of RWA reduction from the use of internal models compared to the application of the corresponding standardised approach. The overview of RWA table has been amended to reflect the changes in the pillar 1 requirements and tie in with detailed disclosure per risk type in the other sub-divisions.

Sub-division 3: Linkages between Financial Statements & Regulatory Exposures

- This disclosure compares the carrying amounts as reported in balance sheet of published financial statements with those under regulatory scope of consolidation enable users to identify the differences between a Reporting Bank's accounting scope of consolidation and its regulatory scope of consolidation.
- The regulatory figures and instructions have also been updated to reflect the changes in banks' capital requirements calculation.

Sub-division 4: Credit Risk

- The flexible-format table on Specialized Lending exposures under the IRBA reflects the removal of the simple risk weight method and focuses on the slotting approach. Inclusion of the changed treatment of equity exposures.
- A breakdown of credit derivative providers by name (if not confidential), rating class or type of counterparty, as well as revised requirements on credit exposure and risk mitigation effects required.
- The changes also include a revisited presentation of exposures by asset class and risk weights.

Sub-division 5: Counterparty Credit Risk

■ The table on CVA risk capital requirements will be removed, the revised CVA approaches will be reflected in the dedicated sub-division 15. Qualitative disclosures related to CCR is mandatory for all reporting banks.



Proposed key changes to banks disclosure requirements



Sub-division 6: Securitisation

The revised tables allow for a separate "of which" presentation of "simple, transparent, comparable" (STC) securitization.

Sub-division 7: Market Risk

- This sub-division focuses on the market risk capital requirements calculated for trading book and banking book exposures that are subject to a market risk capital requirement.
- To be In line with the latest proposed Basel III adoption, the revisited tables allow for the reporting of exposures subject to the Simplified Standardized Approach for Market Risk (SSA(MR)) and reflect the changed model types under the internal models approach (IMA).

Sub-division 8: Operational Risk

- The capital requirements for operational risks has been fundamentally revisited in the course of the Basel III finalization and in the corresponding disclosure requirements.
- Banks are required to provide qualitative information on their framework, the business indicator includes. its components as well as the calculated capital requirements from operational risks.
- Banks with a business indicator exceeding S\$1.5bn or with a supervisory approval to use the internal loss multiplier are required to disclose their historical losses.

Sub-division 9: Interest Rate Risk in the Banking Book (IRRBB)

- More detailed requirements for the qualitative and quantitative disclosure on IRRBB which includes 6 interest rate shock scenarios and their impact on economic value (EVE) and net interest income (NII)), accompanied by explanatory notes.
- Banks need to provide a comprehensive description of the overall IRRBB management and mitigation strategies.
- Descriptions should indude inter alia: frequency of the IRRBB measures calculation, specific measures taken to gauge its sensitivity, interest rate shock and stress scenarios applied for the estimation of the impact on the economic value and earnings, modeling assumptions used in the internal measurement systems (IMS) if deviating from those used for the disclosed information, approaches to hedging IRRBB, as well as the associated accounting treatment.



Proposed key changes to banks disclosure requirements



Sub-division 12: Leverage Ratio

• The revised template reflects the changes proposed for the calculation of the Leverage ratio (revised Annex 4A to Notice 637), incl. but not limited to the processing of SFT and derivative transactions.

Sub-division 14: Asset Encumbrance

- The purpose of this newly introduced sub-division is to provide the carrying amount of encumbered and unencumbered assets using period-end values for the bank's regulatory scope of consolidation, including securitization and securitized exposures.
- The presentation is aligned with the assets on the balance sheet (disaggregated), including any assets used in central bank facilities together with other encumbered and unencumbered assets.
- A narrative should explain significant changes across periods and provide other relevant information.

Sub-division 15: Credit Valuation Adjustment Risk

- The CVA risk is to be disclosed in this newly introduced section and has been removed from Sub-division 5.
- "General qualitative disdosure requirements" related to CVA are applicable to all banks subject to the CVA risk capital requirements. The purpose is to provide a description of the risk management objectives and policies for CVA risk.
- CVA capital requirements and an accompanying narrative are presented in line with the applicable CVA approach:
 - reduced BA-CVA: tables 11-50;
 - full BA-CVA: tables 11-51;
 - SA-CVA: tables 11-52





Conclusion & Recommendations



Challenges for banks

In the wake of implementing the revised capital requirements following the local adoption of the Basel III finalization, banks also need to prepare for the upcoming revised disclosure requirements albeit still pending finalization.

Expected Challenges include but are not limited to:

- Implementation of revised requirements in processes and systems: the changes of the disclosure requirements, templates and tables will require adjustment of disclosure-related processes and (potentially) enhancements of systems.
- Review and enhancement of data flows between the system for capital requirements calculation (RWA engine), other data sources and the disclosure system to ensure that the data presented align and reconcile with the data used in the capital requirements calculation.
- Joint efforts of different departments required for changing and executing the disclosure processes: the quantitative and qualitative data required for the pillar 3 disclosure is typically distributed across different departments and teams. The leading department needs to engage all these parties (as well as other stakeholders) to ensure a consistent and coherent disclosure under the revised requirements.

Recommendations

While the implementation of the revised capital requirements is ongoing, banks are well advised to assess the required adjustments in the existing disdosure processes and data flows, e.g. in the form of a gap analysis.

Upon understanding the scope and extent of the required implementation, banks can **plan and estimate the implementation** of the revised requirements and allocate the resources required to implement those changes.

When preparing the disclosure reports, in particular the first disclosure under the new requirements, management and operational teams may want to review and reflect on the quantitative and qualitative disclosures and accompanying narratives. Focus areas should include e.g. the reconciliation of numbers and narratives as well as a reflection on the message the report might convey to share- and bondholders and other users of the disclosure.







Funded in 2019, live since early 2020, Manaos is a subsidiary of BNP Paribas with a team of 25+ financial experts and digital natives. Manaos is an open servicing marketplace that connects investors and asset managers to ESG data & service providers in a simple, evolutive and secure way.

Manaos enables institutional investors to store their fund data on a single platform in order to obtain a comprehensive and transparent view their investments. They can in turn estimate the Environmental, Sustainability and Governance (ESG) impact of their portfolios through a panel of innovative companies readily available on the Manaos applications catalogue.



Sebastien Messéan

General Manager of Manaos, spent over 20 years in the securities services industry. He joined BNP Paribas Securities Services in 1998 and spent 12 years in London where he was head of Clearing and Custody Services. Back in France in 2014, he contributed to the creation of the Digital Transformation department as COO. Since 2019, he has been the general manager of **Paribas** Manaos, **BNP** subsidiary specialised in data and service interoperability for the institutional finance ecosystem.

Market place applications: 30 apps and counting

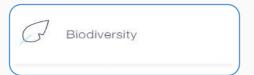


ESG Scoring & Impact









Partners integration

Sustainable 1













Interview with Sebastien Messéan – General Manager of Manaos:

How do you describe Manaos' product and value proposition?

Manaos is an open-architecture ESG platform that revolutionises the way investors access valuable sustainability data and report on the impact of their investments. Through a single interface, Manaos' clients are able to seamlessly connect their portfolio data to top-tier rating agencies and FinTech's to collect scores and manage all of their ESG requirements, fast and at scale by providing multiple feeds into a wide variety of data sources and ESG specialists.

Manaos aims at overcoming challenges around ratings' consistency, covering most analytical frameworks, regulatory duties, asset classes and geographies. With Moody's, S&P Global, Clarity AI, Util and soon CDP and MSCI on Manaos, users can solve trending use cases including ESG, the UN SDGs, Biodiversity, Carbon footprint and Paris Alignment but also SFDR, EU Taxonomy, Article 29, TCFD among others.

To further raise data quality, Manaos also hosts a data exchange interface where investors can collect fund inventories from asset managers to harmonise and complete their investment data. Modular by design, Manaos fast-tracks the way investors connect with third-party apps and retrieve data. Manaos bridges the concepts of sandbox and production platform by allowing users to estimate portfolio coverage, test solutions from a number of providers and sample what is available without having to purchase it first. Then, Manaos users can choose how they wish to ingest scores: aggregated at portfolio level, or at asset level, via API, SFTP or manually. Through this flexibility, Manaos shortens project implementations from weeks or months, to minutes or days.

As opposed to traditional 'build or buy approaches' to ESG data/reporting, where the cost and time-to-market can be very high, Manaos was also designed to maximize efficiency and minimize upfront capital expenditure. The plug and play model allows clients to carve their ESG solutions on the go and keep a variable cost structure, adapted to small and large investors alike.

Manaos is the go-to-choice for investors wanting to:

- Use the full span of the tools and innovation the ratings market has to offer
- Keep control over the level of modularity of the solution and ensure scalability
- Reach sustainability-related objectives faster with a variable cost structure







How did Manaos start, what was the initial product vision and how has it evolved?

Manaos started in 2018 in BNP Paribas Securities Services' premises, with the idea that institutional investors and asset managers were not well equipped to take part in our century's cloud revolution and needed a better way to exchange data, at scale. Early on, ESG came as the most obvious use case to start with since it is changing the amount of data investors need to process on a daily basis. With the idea that quality investment data is a strong prerequisite for sound scores, the first product we developed was a data exchange interface aimed at helping Asset Owners collect fund inventories from their Asset Managers to get a comprehensive and harmonised view of their portfolio. Building on that, we developed our second value-proposition: the Open-ESG marketplace.

On this marketplace, investors can sift through a large variety of third-party apps addressing top-trending use cases and regulatory requirements. Analytical frameworks include ESG, the UN Sustainable Development Goals, the Paris Alignment goal and specific risks such as Climate Risk, Transition Risk, Physical Risk, Biodiversity Risk.

Most importantly, the apps also address regulatory duties such as SFDR and Taxonomy. The development of an EET generation feature is currently underway. Manaos onboards 6 rating providers with a set of 30+ apps.

What advantages does Manaos offer for Asset Owners?

Manaos offers Asset Owners a platform dedicated to all ESG-related needs at a fraction of the price they would pay if they went to each rater individually. More specifically, Manaos enables AOs to collect investment data directly onto the platform, harmonise it through TPT standards, and set automated collection processes. Once collected, the investment data can feed the Open ESG marketplace and AOs can get first sustainability scores in a matter of minutes instead of months.

What are the advantages for Asset Managers?

Like Asset Owners, Asset Managers can use the platform at a fraction of the price they would pay if they went to each rater individually. More specifically, Manaos enables AMs to collect and disseminate investment data directly onto the platform, harmonise it through TPT standards, and set automated collection processes. Once collected, the investment data can feed the Open ESG marketplace and investors can get first sustainability scores in a matter of minutes instead of months.







What are your differentiators compared to data providers, aggregators and orchestrators?

We are a connector with built-in features. We stand out from the competition thanks to the combination of our Open-ESG marketplace and data exchange interface on a single platform. First, we do not provide proprietary scorings. Rather, we facilitate connections by providing contractualisation directly between the client and the provider on our platform. Second, aggregators and orchestrators do not provide investors with an end-to-end platform for both investment data standardisation and 3rd party data and services connections.

How do the current discussions and regulators' activities around ESG ratings affect your product and your clients? How do you respond to this?

The ESG landscape is moving fast. We respond to it by keeping a close eye on the market while conducting our roadmap to provide spot on solution at all time. We have live solutions for SFDR, the EU Taxonomy, TCFD, Article 29, and are currently working on EET.

How do expect the ESG data market to change over the next few years?

The ESG market is hard to read and complexity is here to stay. As regulations build up, use cases multiply. Plain ESG in no longer enough, now investors need to drill down to more specific approaches and frameworks like the UN SDGs, physical risks, energy transition risks, biodiversity, water etc. To assess the impact of their investments, asset managers and asset owners will need to rely on more than 1 single source of truth. As they do for bonds risk estimations, they will need to challenge their scores against 2-3 sources to help prevent assessment biases.

New regulatory frameworks are being enforced, adding up to the complexity. Plus, the FinDatEx released an EET file format, changing the standards through which investors exchange sustainability scores.

For those reasons, we have opted for a fully modular open-architecture approach – in our view, the only approach valid to address the myriad ESG challenges at scale.



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