



Saudi Arabia

Saudi Vision 2030 is driving growth in the Kingdom of Saudi Arabia's financial services industry





www.commerzbank.com/worldwide

The Euromoney Awards for Excellence honoured Commerzbank as Germany's Best Bank for its strategic approach that is creating a 'stable, efficient and more profitable lender' amidst challenging times for the German banking sector. Euromoney, 07/2017 issue







The trusted solutions partner for today's financial services

Built on more than 40 years of industry experience with over 2,000 customers across the globe, we work with 70 of the world's top 100 banks, insurance firms, and telco operators. SmartStream solutions streamline operations, deliver costefficiency and enhance risk management through on-premise, cloud and managed solutions.

Discover what real middle and back-office transformation can mean for your business.

info@smartstream-stp.com smartstream-stp.com





UK Government grants CSDR, EMIR and CCPs equivalence to EEA states post-Brexit

The UK Government has granted central securities depositories (CSDs) in the European Economic Area (EEA) states the Central Securities Depositories Regulation (CSDR) equivalence. Rishi Sunak, chancellor of the exchequer, explained that CSDR will form part of UK law at the end of the transition period on 31 December 2020.

With equivalence granted, the Bank of England can then assess CSDs in the EEA for recognition, subject to establishing cooperation arrangements with the relevant EU authorities.

Sunak said that CSDs – once recognised – can continue to service UK securities and to exit the transitional regime contained in onshored Article 69 CSDR and Part 5 of The Central Securities Depositories (Amendment) (EU Exit) Regulations 2018.

Elsewhere, the UK Government has also granted equivalence to central counterparties (CCPs) established in EEA states.

Sunak said subject to entry into an appropriate cooperation arrangement between the Bank of England and the relevant national competent authority in that EEA state, and a CCP-specific recognition determination by the Bank of England, after the end of the transition period UK firms will be able to continue using EEA CCPs.

However, he noted this equivalence decision does not exclude EEA CCPs from the Temporary Recognition Regime (TRR).

Until recognition decisions are made, EEA CCPs who meet the relevant eligibility criteria will

continued on page 7



OCORIAN

Seamless solutions for capital markets

Ocorian understands the commercial imperatives that underpin capital market transactions and provides support at every stage of the life cycle.

Our global network delivers customized, scalable solutions to provide the support our clients need: how and where they need it.

- Expert teams in banking, finance, insurance and law
- Trusted partner with flexible solutions
- Committed to your success

For more information on our services go to www.ocorian.com

Bermuda | BVI | Cayman Islands | Guernsey | Hong Kong | Ireland | Isle of Man | Jersey | Luxembourg | Malta Mauritius | Netherlands | Singapore | UAE | UK



Latest News

Payments Canada picks new clearing and settlement solution provider

9 **Latest News**

> **EACH** raises concerns over EU CCP consultatio

10 **Latest News**

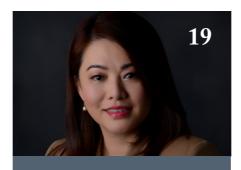
> Increased automation could reduce asset servicing costs, reveals DTCC

12 **Latest News**

> **4Pines Fund Services** selects Alluve Systems for fund accounting

15 **Latest News**

> Allegro rebrands as Ocorian Fund Management



Capital Markets

SWIFT's Stella Lim says asset managers face existential questions about consolidation or partnership



Richard Anton discusses remote, flexible, working and how CIBC Mellon stayed connected through the pandemic



Cryptocurrency Focus

The newly proposed digital asset legislation in Germany is set to strengthen the country

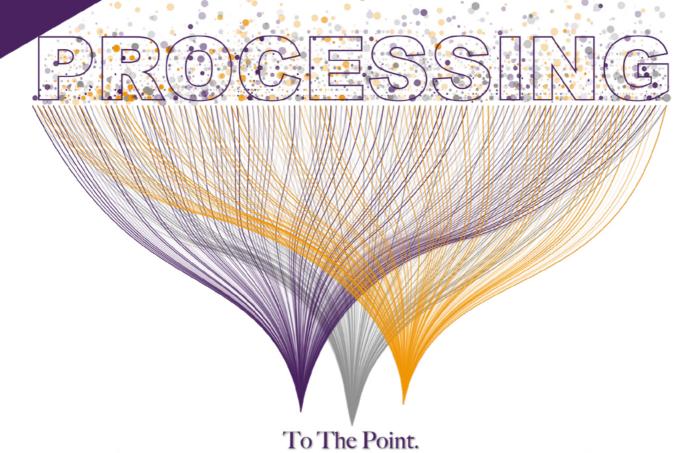


Multi-Cloud Strategy

Exactpro's losif Itkin says firms will see the benefits of employing the right mix of expertise and tools



point.



foster your business with our automated regulatory reporting solution

www.p9dt.com





Payments Canada picks new clearing and settlement solution provider

Payments Canada has selected Mastercard's Vocalink as the clearing and settlement solution provider for the country's new real-time payments system, the Real-Time Rail (RTR).

Expected to launch in 2022, RTR will support payment information travelling with payments and act as a platform for innovation, enabling the introduction of new payment products and experiences.

While RTR is operated by Payments Canada, it is underpinned by the ISO 20022 data standard, and regulated by the Bank of Canada.

The new partnership will draw on Mastercard's payments technology to provide the infrastructure and services to support the clearing and settlement for the RTR.

According to Payments Canada, the clearing and settlement solution will meet all of its requirements, including support for the ISO 20022 messaging standard, and will comply with the Bank of Canada risk management standards for prominent payment systems.

Canada's new real-time payments system will consist of two components including a clearing and

settlement component provided by Mastercard; and an exchange component.

Payments Canada is in the final stages of the vendor procurement process for the exchange component and has revealed a public announcement will be made in due course.

Tracey Black, president and CEO of Payments Canada, said: "Mastercard's Vocalink business is a demonstrated leader in the real-time payments ecosystem and they will be a valuable partner for Payments Canada in the introduction and ongoing operation of Canada's real-time payments system."

Black continued: "Providing Canadians and Canadian businesses with access to faster, datarich payment options will enable innovation, support the long-term growth of the economy, and strengthen our global competitiveness."

Sasha Krstic, president of Mastercard in Canada, commented: "As a company that operates real-time payments systems, across card and account rails around the world, we've seen first-hand how consumers, businesses, and governments benefit from the efficiency, transparency, and innovation they provide."

remain in the TRR, which is due to last until December 2023 and may be extended by HM Treasury.

Equivalence has also been granted to EEA states for Article 2A of European Market Infrastructure Regulation (EMIR).

This will enable UK firms to continue to treat derivatives traded on EEA regulated markets as exchange-traded derivatives rather than over-the-counter (OTC) derivatives.

Sunak explained that facilitating this continuity for firms minimises the disruption they will experience following the end of the transition period.

Finally, the government has granted equivalence to EEA states for Articles 107 (3),114(7), 115(4), 116(5), 132(3), 142(2) and 391 of the Capital Requirements Regulation. This direction covers seven equivalence decisions.

For UK firms, Sunak noted that these equivalence decisions will ensure they will not be subject to increased capital requirements as a result of their EEA state exposures.

The decisions are in addition to the directions already made by HM Treasury in 2019 which granted equivalence and exemption decisions to the EEA States.

The announcement follows upon a previous message from Sunak earlier this year, where he confirmed several major updates to the UK's Brexit plans for adopting EU rules frameworks in a written statement that will radically impact the country's securities services market participants.



Benchmark Conversion Service from triReduce



Moving legacy OTC ICE LIBOR risk to new alternative benchmarks

- Consistent process for all IBORS and CCPs
- Deep liquidity pool and proven process
- Established connectivity to CCPs and market infrastructure
- Participants retain control of their market risk
- Preserves CCP cash flow neutrality

Available soon to all market participants with cleared swaps.

Contact us at BenchmarkConversion@trioptima.com

All information contained herein ("Information") is for informational purposes only, is contidential and is the intellectual property of CME Group Inc and/or one of its group companies ("CME"). The Information is directed to Equivalent Counterparties and Professional Clients only and is not intended for Non-resistants (as defined in the Swedish Securities Market Law (lag (2007:528) now wiredpeoppersmarknades) or equivalent in a relevant jurisdiction. This Information is not, and should not be construed as, an offer or solicitation to sell or buy any product, investment, security or any other financial instrument or to participate in any particular purpose. All representations and warranties are expressly disclaimed. Access to the Information by anyone other than the intended recipient is unauthorized and any disclasory, copying or redistributor is prohibited without CME's prior written approval. If you receive this information in error, please immediately delete all copies of it and notify the sender. In no circumstances will CME be liable for any indirect or direct loss, or consequential loss or damages including without limitation, loss of business or profits arising from the use of, any inability to use, or any inaccuracy in the Information. CME and the CME loga are trademarks of the CME Group. TriOptima AB is regulated by the Swedish Financial Supervisory Authority for the reception and transmission of orders in relation to one or more financial instruments. TriOptima AE is registered with the US National Futures Association as an introducing broker. For further regulatory information, please see www.nex.com and www.cmegroup.com.

EACH raises concerns over EU CCP consultation

The European Association of CCP Clearing Houses (EACH) has called for a robust and efficient approach to approve central counterparty (CCP) products, services and risk models in response to the European Securities and Markets Authority (ESMA) consultation on the European Market Infrastructure Regulation (EMIR) article 15 and article 49.

ESMA's consultation paper covered the technical standards on conditions which require an extension of authorisation for a CCP, conditions which require validations of a CCP's changes to models and parameters by the national competent authority (NCA) and ESMA and the procedure for consulting the college on whether or not those conditions are met.

One concern raised in EACH's response was the complexity of ESMA's proposed approach.

It was suggested that the proposed process would not improve the existing one and would "unnecessarily increase complexity and duration of the processes of extending services and activities (Article 15) and the approval of model and parameter changes (Article 49)". EACH also found the structure of incentives problematic, stating: "The elongated and complex model governance procedures suggested by the draft ESMA RTS may increase the contradictory outcomes to those initially intended that are already being experienced in some cases."

According to the association, the cost-benefit assessment of maintaining the modelling framework at the state-of-the-art, and keeping parameters up-to-date for prevailing market conditions, are not so simple any more.

Additional concerns were raised around 'accountability versus responsibility'. EACH noted and appreciated the accountability of ESMA and the relevant colleges when it comes to CCP supervision. However, it said that the steps proposed in this consultation represent a move by authorities from accountability to responsibility.

"Accountability and responsibility should not be confused," EACH highlighted.

CCPs are responsible for the day-to-day management of their models, and the suggested text by the draft ESMA regulatory technical standards seems to preclude the execution of such a role, EACH observed.

"Regulators, complementarily, have the important role of overseeing those practices, using legislation to establish the boundaries of appropriate action," the association added.

Meanwhile, allocation of responsibility and the level playing field was another concern with the association explaining the proposed transfer of responsibilities from the NCAs to ESMA and respective colleges could imply that the level of context and information is reduced during the decision-making process.

EACH highlighted: "Furthermore, an additional consultation which might lead to unlevel playing field between CCPs and the governing processes applied due to potentially not always consistent decisions and unified practices."

The decrease of possibilities for risk management was also an area of concern with EACH suggesting the proposed approach unnecessarily increases 'time-to-market' of new risk products, services and changes to risk models, without particular governance and crucially, without any defined timing.

"The proposed approach could significantly (or even in some extreme cases indefinitely) postpone the approval of new products," it noted.





Increased automation could reduce asset servicing costs, reveals DTCC

The Depository Trust & Clearing Corporation (DTCC) has estimated that larger broker-dealer firms could save \$2 million within asset servicing through the adoption of greater automation.

Asset servicing was one of seven areas of broker cost savings as a result of greater post-trade automation, according to a DTCC survey.

The survey of nine major international global broker-dealers that typically spend between \$150 million and \$175 million globally on post-trade services related to cash securities, moving to a "no touch processing workflow" would allow them to reduce headcount, repair charges, technology expenses and claims and fees significantly.

The estimated savings per firm were broken down into seven categories, with largest figures attributed to settlements (\$10.8 million), trade support (\$7 million), financing (between £5 million and \$10 million), and technology expenses (\$5.4 million).

Other areas where savings can be achieved are SSI reference data (\$1.5 million), agent bank fees (\$2.3 million), and asset servicing (\$2 million), says DTCC.

The survey showed that by leveraging post-trade automation, firms can eliminate redundancies and manual processes, reduce associated costs, and mitigate operational risks.

It can also reduce repair charges, technology expenses and claims and fees significantly, the survey revealed.

Matthew Stauffer, managing director, head of institutional trade processing at DTCC, stated: "The findings of our survey highlight the benefits of leveraging automated post-trade solutions to reduce the costs of operational functions and the risk inherent in manual processes."

"The adoption of a no-touch workflow allows firms to focus their resources on the parts of their business that create true value." EACH explained: "This would have the paradoxical consequence of decreasing, rather than increasing the possibilities to enhance risk management at CCPs, inhibiting the offering and quality of risk management products to the market."

Also in its response, EACH outlined governance of the proposed approach as an issue explained that the consultation paper does not include any governance to operate the new processes.

There is no definition of the new timeline for the process of determining whether an extension of activities or services is subject to Article 15 and whether a change to the models and parameters is significant in line with Article 49.

"We believe that in line with the EMIR provisions, a specific and efficient timeline must be developed and most importantly enforced. Limiting the amount of time necessary for launching new services is key to spur innovation and competition within the EU, but also on global markets where EU CCPs enter into competition with CCPs from other jurisdictions which may benefit from faster processes," EACH concluded.

ESMA warns fund managers to improve readiness for future adverse shocks

The European Securities and Markets Authority (ESMA) has told fund managers to improve readiness for future adverse shocks in its latest report 'Recommendation of the European Systemic Risk Board (ESRB) on liquidity risk in investment funds'.

The report is in response to the ESRB's recommendation to coordinate with national

competent authorities (NCAs) a focused supervisory exercise on investment funds that have significant exposures to corporate debt and real estate assets.

The report identifies five priority areas for action which would enhance the preparedness of investment funds with significant exposures to corporate debt and real estate assets, for potential future adverse liquidity and valuation shocks.

One priority area identified to enhance the preparedness of the funds is the ongoing supervision of the alignment of the funds' investment strategy.

In order to supervise compliance with rules on liquidity risk management, NCAs should continue their active engagement with, and supervision of, their market participants, ESMA said.

Misalignments between the liquidity profile of funds' investments and their redemption policies should be corrected in a timely manner.

ESMA highlighted the introduction of these measures may take some time, as national provisions may provide for different requirements to be satisfied prior to their adoption, such as informing investors and obtaining authorisation by the regulator.

"In the context of the ESRB recommendation, this applies in particular to the funds analysed in this exercise if potential misalignments are confirmed by further analyses carried out by NCAs," the authority noted.

According to ESMA, this monitoring should be taking into account all information at their disposal. Management companies should be able to justify the liquidity set-up of their funds, at the authorisation phase or during NCAs supervisory actions.

Meanwhile, particular attention should be paid to funds investing in less liquid or illiquid assets, ESMA stipulated.

The second priority area is the ongoing supervision of liquidity risk assessment. ESMA suggested that NCAs should supervise the liquidity risk assessment by management companies. Particular attention should be paid to supervising management companies in their liquidity risk assessment to comply with their obligation to take all factors into account that could have an impact on funds liquidity or that could trigger unwanted sales of assets, it explained.

Additionally, the report highlighted that all relevant items on the liability side of the fund balance sheet should be subject to liquidity stress tests.

The third priority is fund liquidity profiles. In the context of the Alternative Investment Fund Managers Directive (AIFMD) review, additional specifications on how liquidity profiles should be established and reported as part of the AIFMD reporting should be introduced, according to FSMA

This includes how, on the asset side, to determine a "realistic and conservative estimate" of which percentage of the fund portfolio can be liquidated.

Secondly, it includes, on the liability side, how to take into account arrangements with respect to gates and notice periods in the determination of investor liquidity profiles. It was noted in the report that this is important to ensure necessary information on liquidity profiles and to support a risk-based approach in the supervision of liquidity risks mentioned in the first priority.

Elsewhere in the report, ESMA explained the fourth priority deals with the increase of the availability and use of liquidity management tools.



Global Coverage Local Presence

info@goalgroup.com



www.goalgroup.com



4Pines Fund Services selects Alluve Systems for fund accounting

4Pines Fund Services has selected Allvue Systems, an alternative investment technology solutions provider, to provide fund accounting software solutions for its private equity clients.

Allvue's platform will enable 4Pines' clients to streamline and manage their fund accounting through their software as well as a cloudbased solution.

The fund accounting solution will offer clients financial statement reporting, a multi-currency general ledger, cash management, waterfall capabilities and workflow standardisation.

Michael Trinkaus, CEO of 4Pines, said: "Our commitment is to provide our clients with top-notch fund administration solutions to enable better and

faster reporting, and to do that we need technology partners like Allvue."

Trinkaus continued: "By leveraging the strength of Allvue's best-in-class software we will be able to greatly enhance our full-suite fund administration offering and continue to deliver the best service to our clients."

Ryan Keough, chief revenue officer of Allvue, commented: "With increased market volatility, managers need to be laser-focused on investing without having to worry about the other parts of their businesses. 4Pines has solved for this need by building leading-edge fund administration solutions for clients that enable them to focus on what really matters."

ESMA reiterates its support for the ESRB recommendation calling for a harmonised legal framework to govern the availability of additional liquidity management tools for fund managers in both the UCITS and AIFM frameworks.

It was stipulated that the legal framework should also include specifications on the required disclosures for the provision and use of liquidity management tools to ensure greater protection and consistency for investors

The last priority area involves the supervision of valuation processes in a context of valuation uncertainty.

As part of its ongoing supervision of management companies, ESMA said NCAs should carry out further supervisory activities to ensure that management companies valuation procedures cover all market situations including valuation approaches for stressed market conditions.

"The circumstances of delegated portfolio management should be taken into account to ensure that the team in charge of the valuation has sufficient expertise and access to information to analyse the reliability of the valuation sources it uses and establish a fair valuation of the portfolio," the authority affirmed.

Steven Maijoor, chair of ESMA, commented: "In the wake of COVID-19's initial impact on markets, the EU investment fund industry faced a significant deterioration in liquidity in some segments of the fixed income markets as well as valuation uncertainty in the real estate sector. This coincided with large-scale investment outflows from investors. ESMA coordinated a supervisory exercise with national securities regulators involving collecting and



EFA to provide fund admin services to Piquemal Houghton Investments' new fund

European Fund Administration (EFA) has been appointed as fund administrator to a new fund from Piquemal Houghton Investments, a Paris based asset manager.

The new Luxembourg-domiciled UCITS fund has been approved by the Commission de Surveillance du Secteur Financier (CSSF).

As part of the mandate, EFA will provide fund administration services including net asset value calculation, risk and compliance services, performance services and key investor information document production. In addition, it will also support the new fund will trade management services, such as trade matching and settlement monitoring as well as compliance tools.

Bart Speybrouck, business development manager at EFA, said: "It is an absolute pleasure and honour to work with Piquemal Houghton Investments."

"Our expertise and track-record in fund administration and end-to-end outsourcing solutions proved to be a key differentiator."

Céline Piquemal-Prade, CEO at Piquemal Houghton Investments, added: "It has been a pleasure to build this new fund together with EFA."

"From day one they believed in our project and understood our willingness to rely on partners we could trust to handle the fund administration in order for us to be fully dedicated to portfolio management."

analysing data on funds exposed to corporate debt and funds exposed to real estate. The exercise showed that the funds in question managed to respond adequately to redemption pressures."

"However, the work also revealed short-comings that must be addressed in order to enhance funds' preparedness to future shocks, and we have identified a number of priority areas that funds and supervisors should focus on to address potential liquidity risks in the fund sector. This will contribute to ensuring investor protection, orderly markets and financial stability."

"We also encourage swift proposals to amend the EU legislative framework to ensure that liquidity management tools are widely available to asset managers across the EU," Maijoor added.

Northern Trust gains fund admin mandate to support Pershing Square

Northern Trust has been selected to support Pershing Square's Guernsey, Cayman and Delaware domiciled funds.

This follows Northern Trust's recent appointment to provide fund administration services for Pershing Square Capital Management.

Commenting on the new mandate, Jeff Boyd, CEO of Northern Trust hedge fund services, said: "We're very excited to begin this relationship with Pershing Square."

"We pride ourselves on our global reputation and are thrilled to support Pershing Square's investment business with a consistent high-quality service across regions."



... and climbing.

A global player in asset servicing...

Offering leading value in investor services demands constant evolution. At CACEIS, our strategy of sustained growth is helping customers meet competitive challenges on a global scale. Find out how our highly adapted investor services can keep you a leap ahead.

CACEIS, your comprehensive asset servicing partner.







Citi gains new fund admin mandate for Sun Life's first ESG fund in Hong Kong

Citi has been appointed by Sun Life Asset Management as trustee, custodian, fund administrator and transfer agent for the Sun Life AM Hong Kong environmental, social and governance (ESG) index fund.

The ESG index strategy is Sun Life's first fund to be registered in Hong Kong.

The Sun Life AM Hong Kong ESG index fund will track the Hang Seng ESG 50 Index, the top 50 Hong Kong-listed companies that perform well on ESG factors based on the Hong Kong Quality Assurance Agency's framework.

Sun Life's fund is one of a growing number of ESG funds approved by the Hong Kong Securities and Futures Commission as it builds a hub for green and sustainable finance in the region.

As part of the growth, HSBC was recently selected to provide securities services for Hong Kong's first broad-based ESG ETF Haitong International Asset Management.

Commenting on Citi's new mandate, Stewart Aldcroft, chairman of Cititrust, said: "We are proud to have been selected to provide complete trustee, custody and fund administration support to Sun Life in delivering the first Hang Seng ESG 50 Index fund to investors in the Hong Kong market."

Stanley Ngan, CEO of Sun Life Asset Management (HK) Limited, commented: "We are delighted to be working with Citi following the launch of our first locally registered fund in Hong Kong. Citi has a good understanding of our needs, offers high quality service, has a robust platform, and is equally committed to sustainability."

Pershing Square chief financial officer Michael Gonnella, added: "Northern Trust has all the capabilities we were looking for in our administration partner. Northern Trust is able to execute the complex daily, weekly and monthly requirements for our funds and deliver seamless service across geographies and products."

Elsewhere, Northern Trust Hedge Fund Services has launched a new investor portal for alternative asset managers. The new portal, which has been built in partnership with fintech provider InvestCloud, will provide an enhanced investor experience, updated data feeds, as well as customised views and analysis.

Allegro rebrands as Ocorian Fund Management

Allegro, a Luxembourg based third party management company, alternative investment fund manager (AIFM) and fund administrator, has become Ocorian Fund Management.

The rebrand follows Ocorian's acquisition of Allegro in April, and the subsequent rebranding efforts.

Ocorian explained that the move adds depth and breadth to its funds business, which offers fund administration and associated services across all investment structures with particular specialisms in green energy, listed and private funds.

Christophe Gaul, regional head of Europe at Ocorian, said: "The acquisition of Allegro is a major milestone for Ocorian. We are ideally placed to deliver full management company, AIFM and fund administration services and our global funds offering is significantly enhanced."

Our asset services are first rate and second to none. Perfect for third party funds.

Asset Management Wealth Management Asset Services



Geneva Lausanne Zurich Basel Luxembourg London Amsterdam Brussels Paris Stuttgart Frankfurt Munich Madrid Barcelona Turin Milan Verona Rome Tel Aviv Dubai Nassau Montreal Hong Kong Singapore Taipei Osaka Tokyo assetservices.pictet





Apex and RepRisk partner on ESG

RepRisk, an environmental, social, and governance (ESG) data science firm, has teamed up with Apex Group to provide ESG risk data to the private market.

As part of the partnership, Apex's ESG rating and advisory portal has been updated to include RepRisk analytics reports and cases data on private companies, allowing ESG insights to private companies and their investors.

Apex and RepRisk aim to close the gap for private companies by delivering an ESG tool based on data insights.

Alexandra Mihailescu Cichon, executive vice president sales and marketing at RepRisk, said: "RepRisk is the only ESG provider to systematically cover private companies. While our dataset grows every day, it currently includes more than 120,000 private companies worldwide, in every sector and market. RepRisk looks at what the world says about a company, not what a company says about itself

 and in combination with Apex's analysis on company disclosures and reporting, we're able to provide a uniquely holistic picture of a company's ESG profile."

Andy Pitts-Tucker, managing director, Apex ESG ratings and advisory, explained that the partnership can play a role in influencing significant behavioural change, drive capital flows, and support clients as they look to improve their ESG performance.

"Apex ESG's new platform was established to satisfy the demand from private markets for greater transparency through a high quality, global, independent, single-source ESG solution. We help investors to collect, verify and evaluate data on their portfolio companies and benchmark the quality and performance of that data to produce quantitative and comparable analysis. With access to RepRisk's independent ESG data and insights, we are excited to provide a holistic perspective on each company," Pitts-Tucker added.

"We now have a very sizable team in Luxembourg with nearly 150 professionals servicing blue-chip companies, investment managers, institutional investors and high-networth individuals based in Europe and across the globe," he added.

Thomas Fahl, managing director of Ocorian fund management, commented: "Becoming part of Ocorian provides us with an expanded international footprint, and our clients can benefit from a significantly broader range of fund and fiduciary solutions and specialist expertise."





We're not just providing custody services.

We're creating solutions that focus on your post-trade goals.

#PositiveImpact



in this document relates to services offered by Global Transaction Banking of Deutsche Bank AG, any of its branches and affiliates to customers as of May 2018, which may be subject to change in the future. This advert and the general description of the services are in their nature only illustrative, do neither explicitly nor implicitly make an offer and therefore do not contain or cannot result in any contractual or non-contractual obligation or liability of Deutsche Bank AG, any of its branches or affiliates. Deutsche Bank AG is authorised under German Banking Law (competent authorities European Central Bank and German Federal Financial Supervisory Authority (BaFin)) and, in the United Kingdom, by the Prudential Regulation Authority, it is subject to supervision by the European Central Bank and by BaFin, Germany's Federal Financial Supervisory Authority, and is subject to limited regulation in the United Kingdom by the Prudential Regulation Authority and Financial Conduct Authority, Details about the extent of our authorisation and regulation by the Prudential Regulation by the Financial Conduct Authority, are available on request. This communication has been approved and/or communicated by Deutsche Bank AG or by its subsidiaries and/or affiliates in accordance with appropriate local legislation and regulation. For more information: www.db.com. Copyright © May 2018 Deutsche Bank AG. All rights reserved.

The cure for the buy-side blues: interoperability in an era of change

As capital markets functions converge are increasingly outsourced, asset managers face existential questions about consolidation or partnership. But who is the right partner to help them navigate this turbulent period and emerge ready for a competitive future? SWIFT's Stella Lim explains more

Throughout 2020, the beleaguered buy-side has faced new pressures. The market volatility stirred by economic reverberations of the global pandemic has ruptured business-as-usual. For many capital markets players, it has introduced new pain points and has exacerbated existing industry issues, such as manual processing.

But these are just new creases in a surface where deep wrinkles had already formed. Asset managers were already under increased pressure from maturing regulatory regimes around research and reporting, they have been facing more aggressive demands from investors in an era of evaporating alpha and are all too accustomed to being scrutinised for their data hygiene, for instance in how they demonstrate their compliance with environmental, social and governance (ESG) mandates. Taken together, these challenges can appear insurmountable and paint a gloomy picture for the asset management industry.

However, where there are challenges, there are always opportunities. An already accelerating trend toward consolidation is quickening. New partnerships are burgeoning. And for some asset managers, 'coopetition' – collaboration between competitors – is allowing them to expand on limited portfolio options and offer their clients more blended and bespoke services. For example, combining offerings can serve to highlight key differentiators for asset managers, such as the fact that their clients still rely on them as an entry into non-standard asset classes like real estate, derivatives, private equity and even crypto-assets.

In this new area of increased partnership, asset managers can benefit from the combination of powerful brands but an old problem has reared its ugly head -- many institutions on the buy-side, not just asset managers, use different data formats and standards. Like tectonic plates, layers of technology



A lack of interoperability isn't good for an industry that still relies on fax machines and ink



have created fault lines that lead to disparate reporting systems and proprietary standards – all of which have led to an industry that's not particularly interoperable.

A lack of interoperability isn't good for an industry that still relies on fax machines and ink. Nowhere is this more obvious than in the areas of collateral management and reconciliation, where a high volume of manual intervention is still required. Transposition errors and data mismatches due to these processes create inefficiencies that drive up costs.

Drowning in a sea of spreadsheets, asset managers are increasingly outsourcing more and more functionalities to third parties to modernise and meet client demand. Short of ripping out your entire back office and re-building from the ground up, there is little choice but to partner. Shopping out services only reduces the workflow, it doesn't reduce responsibilities towards clients and regulators. Faced with an increasing burden, these pressures are forcing mid-sized asset managers to either shed functions or to find the perfect partner to fill in the gaps.

Choosing the wrong partner can leave an asset manager reliant on a vendor—even if the service doesn't quite match the description on the tin. In fact, asset managers often discover a mismatch between what is offered and what they actually need. If they change their mind, apart from switching cost, it's also challenging, and costly, to re-internalise outsourced activities. Furthermore, this process is no mean feat and a transition can take around nine months to fully execute.

Modern asset managers serve a global client base. So they have a strong need to connect to multiple custodians in order to serve their clients' needs. For them, integration isn't a simple prospect. It means working with different data formats, not to mention the differing levels of quality of data flows. Maintaining consistency between your data and outsourced data can be challenging – and costly.

What asset managers need is quite simple. They need a way to capitalise on data. Not only market data, but their own proprietary data. So, internal and external data needs to be interoperable and formatted for a present need for automation and a near future with artificial intelligence (AI) and machine learning. Data that doesn't have to be transposed, manually from window to window. A single, full-service standardised gateway would do the trick

But they also need service with a global edge – an offering with both the kind of reach that stretches into every major global market, but avoids the pitfalls of aligning regulatory compliance practices across disparate markets.

Most importantly, they need to connect securely and easily, not only to the vendors that best fit their needs, or to a counterparty, but to a global ecosystem. A truly international ecosystem that includes current and future clients. An ecosystem that is also a green field for innovation and a collaborative environment, where layers of new value-added services take shape and an enhanced customer experience is delivered.

SWIFT is working closely with its community to build such a platform. It will enable greater transparency and increased efficiency in unprecedented ways for global securities players. By focusing our efforts on reducing risk and settlement failures, delivering end-to-end transaction monitoring that provides visibility on the latest status – starting with settlement instructions, but with the plan to extend to other parts of the securities lifecycle such as corporate actions and collateral management – in near-real time and building a consolidated, real-time view of holdings across providers, we are answering the need of the industry in an unprecedented way.

For over 40 years, SWIFT has provided secure and reliable financial messaging to the world's financial services industry. Less commonly known is the fact that securities-related messaging now represents over half of the traffic on SWIFT. Now we are working with capital markets players – and the asset management community specifically – to co-engineer a platform that will deliver greater efficiency and transparency than ever before.

Learn more about what we're doing by visiting www.swift.com



BOV Fund Services Limited, Malta's top fund administrator, provides highly competitive, cost-efficient turnkey fund set-up solutions. Other services provided to fund managers and fund promoters cover a comprehensive range of fund administration services including fund accounting, shareholder registry services, regulatory reporting and corporate services amongst others.

Other ancillary services include a full package of back office services that enable our clients to comply with international regulations as well as best market practices.

BOV FUND SERVICES

+356 2122 7148 www.bovfundservices.com infobovfs@bov.com



The future of work



CIBC Mellon has spent many years establishing a strong and resilient foundation, enabling it to rapidly shift 98 percent of its team to remote work and deliver stable execution through tremendous market volumes and volatility in March 2020. As volumes and volatility subsided from the record highs, we saw key metrics in both operational efficiency and employee sentiment continue to meet and in a number of cases exceed pre-pandemic benchmarks.

CIBC Mellon launched a strategic "Future of Work" initiative, engaged external consultants and took stock of how it could leverage its success to better

position its clients and its employees for success through the challenges of 2021 and beyond.

2020 was a year of unprecedented challenge and change, with market and industry stakeholders forced to stay connected even while remaining apart amid the coronavirus pandemic. From potential mail disruptions to an enormous number of operational, documentation and tax processes reliant on physical processes and wet signatures, market players were forced to revisit and carefully assess operating processes and models in this "new normal".

What factors supported a successful response?

CIBC Mellon's resiliency and success in navigating this new working environment during the pandemic was driven by a number of factors, including a disciplined approach to business continuity, robust processes, resilient systems and technology, proven work-from-home capabilities, a client-centric focus, strong risk culture, an engaged workforce and the incorporation of insights from the company's parent companies CIBC and BNY Mellon.

Resilient systems and technology

Even amid heightened pressure CIBC Mellon's leadership team understood the importance of upholding the trust placed in the company, and the company's operational and risk managers were careful to reinforce the importance of following existing processes. The company had invested in bank-strong technology, regularly reinforced the importance of operational execution, cybersecurity protection and strong controls and governance. There was a clear awareness of risks – for example noting that one of the largest sources of potential security vulnerabilities is well-intentioned users short-circuiting controls while seeking to deliver for clients. The company undertook strong security programming, from employee education and awareness efforts to strong data security measures over endpoints (for example, always-on VPN and the closure of USB ports).

The company also recognised the importance of planning. Since achieving certification to the ISO 22301 Business Continuity and Societal Security Standard in 2015, the company has conducted regular and robust reviews, carried out annual "tabletop" exercises in which executives and leaders respond to a simulated crisis, execution as well as the establishment of split operations across various offices. The company also benefited from real-life experience, having been forced to execute its business continuity plans after flooding rendered the company's headquarters accessible for a full week in 2018 – through which the company delivered seamlessly. Throughout these experiences, the team also recognised the importance of continuous improvement, documenting and addressing opportunities and closing gaps.

Proven work-from-home

Even prior to the pandemic, CIBC Mellon recognised the importance of work-from-home (WFH) to business continuity programming as well as the merits of WFH. CIBC Mellon launched a formal work-from-home program for employees in 2017, enabling employees to work from home regularly. With operational teams regularly using remote work capabilities and desk sharing, and with workflow systems and automated processing in place, the company was

able to rapidly mobilise its team to achieve 98 percent working from home. The organisation continued to engage with clients and provide support – as well as navigating challenges. For example, the company's call centres were only designed to operate in-office, and the company took the people-centric step of temporarily shifting call centre operations to email and call-back services until the company could implement a call centre technology designed to route calls to remote teams. Likewise, the company came together with industry associations, clients and other stakeholders to focus on the many paper processes and wet signatures associated with such processes as pensioner payments, tax reclaims and other market documentation. While the industry as a whole still has many paper-driven processes, the pandemic experience has certainly created strong impetus to continue to move these to electronic formats. No doubt this pressure will continue in the months and years ahead.

Global enterprise perspective

One of the key benefits to CIBC Mellon were the insights and lessons learned from across its global enterprise. The Canadian joint venture has two parent companies, and benefited from their insights across domestic and global operations.

Key achievements

CIBC Mellon has realised several key achievements during the pandemic. We are proud that we have maintained our risk culture, operational control – implementing and tracking more than 80 process exceptions. The centralised tracking of control exceptions was not the only key to maintaining strong governance, but it enabled efficiency: rather than each group individually solving for the control requirements around accepting electronic approvals or adapt a paperless process, once the challenge was surmounted the central exception tracking enabled rollout of those exceptions to other groups facing the same challenge. Like many other aspects of asset servicing, the power of scale made a difference. One critical aspect was both a key achievement and a major success factor: staying connected and keeping communications channels open even as we were physically separated. The company's teams actively engaged with clients and employees, keeping them informed – for example, frequent employee, management and leadership meetings, detailed and regular client updates across multiple formats, and regular employee calls and messaging.

As we transform into the future ways of working, we are implementing technology and collaboration tools. We are proud to maintain and strengthen our positive employee culture and engagement.



CIBC Mellon will focus on achieving a flexible people and

leadership development platform that enhances the overall employee experience and builds on desired CIBC Mellon behaviours



Navigating to future ways of work – strategic framework and initiatives

We have put a strategic framework in place for futures ways of work, with key desired outcomes.

CIBC Mellon operates within flexible working models and spaces to enable organisational resiliency and enhance employee satisfaction and engagement. We recognised the need for a connected and engaged work environment, bringing together employees and clients and leveraging the depth and breadth of all available collaborative capabilities. Employees are at the heart of great outcomes, so the team also recognises the need to support an enhanced employee experience through work/life flexibility.

In a remote environment, employees have been able to maintain their productivity levels and meet or, in some areas, exceed their daily deliverable benchmarks. Employees have noted that the ability to work from home has led to lower stress levels and more time to engage with their family, developing a stronger work/life balance. Teams whose tasks are done later in the day

are finding that previous challenges, such as transit and commuting schedules, are more manageable in a work from home environment. Internal survey results show the vast majority of CIBC Mellon of employees would prefer to continue working exclusively from home post-pandemic, and that overall sustainable engagement is significantly exceeding industry pandemic period benchmarks.

Looking ahead, CIBC Mellon will focus on achieving a flexible people and leadership development platform that enhances the overall employee experience and builds on desired CIBC Mellon behaviours. As we shift our operations to Future Ways of Work, CIBC Mellon has established seven strategic initiatives to guide our transformation:

- Adaptive leadership: Develop an adaptive leadership programme grounded in a refreshed employee value proposition and competency set; that focuses on coaching, communication and modelling of desired behaviours.
- Virtual training and onboarding: Invest in or build virtual training platforms for both clients and employees to support onboarding, ongoing training mentorship and job shadowing programs.
- Digital engagement tools: Invest in and deploy digital engagement tools with an adoption program to increase connectivity for both employees and clients, while strategically capturing and leveraging data and analytics.
- Remote policies and best practices: Define, implement, and update CIBC Mellon remote work policies, "office" requirements and best practices to leverage and promote internally employees and externally with clients.
- Location strategy: Determine and implement location strategy based on operational requirements and costs (i.e. low-cost locations, leveraging time zones).
- Workforce strategy planning: Determine required future workforce skills, define talent/workforce planning strategy and conduct organisational re-design to achieve global scale and footprint.
- Flexible office models and workspaces: Determine applicable working and office models for each location and the "right type" of flexible workspace/benefits, etc. required (i.e. collaboration rooms, hoteling, etc.) implement incrementally.

Key questions and considerations for future operations

To inform CIBC Mellon's strategic efforts, we asked ourselves a few key questions:

Employee experience: How do we retain and strengthen our culture? How do we support employee wellness, engagement and productivity in a remote environment?

Ways of working: How can we best use our physical office spaces – both amid and beyond the pandemic environment? How will clients' interactions with us evolve?

Work environment: How has remote working impacted the performance and interaction of our teams? What do people need at home to support long-term remote productivity?

Talent management: How do we continue to recruit, retain and motivate great people? How does proven remote working and onboarding capability enable us to evolve our talent acquisition?

Some cautionary considerations as we navigate a remote work environment remain. For example, how will we retain our culture and connection, especially as we onboard new colleagues in a remote environment? Some industry watchers feel that remote engagement may not fully substitute for in-office strategic collaboration or long term performance – expressing concern, for example, that millennial workforces or those outside the direct supervision of a manager may be more prone to distraction or dereliction of duty.

At CIBC Mellon, more than 40 percent of employees are millennials – and yet our organisation has seen operational and employee sentiment metrics both rise.

A few other hard questions organisations may wish to ask themselves include: Given that so many of us are now working from home, how do we think together? Some teams are working more hours and putting out more effort. Are a smaller subset of individuals are the ones driving the performance gains, or are employees simply investing more hours? What is our risk of our top performers "burning out", being unable to sustain this performance level, or departing the organisation for other opportunities?

While the company has not yet established a date for return, as we look at key considerations for a return to the office, we have established processes and plans for a safe, phased and partial return, prioritising the health and safety of employees and considering their experience and sentiment, while monitoring advice and best practices from health and government authorities.

We will be taking a tiered and gated approach to re-occupancy over an extended period, and our office occupancy will be below the prepandemic rate.

We will continue to suspend inter-office travel, external meetings, though select employees have the ability to opt-in to return to office-based on business or personal needs/sentiment.

Considerations for our future operations will be to identify opportunities to better utilise facilities and improve collaboration with our employees and clients, recognise that our team members may work remotely on a long-term basis, while sustaining and enhancing stakeholder relationships, and connect virtually.

Sustaining positive momentum

As we explore new ways of working, we are asking what the future looks like look and the ways in which we can build on the momentum that we've established across our organisations and within our teams.

Sustain remote operations: Introduce new technologies, reinforce new behaviours – drive greater transparency, effectiveness and efficiency.

Maintain connectivity: We will continue to put clients at the centre, keep communication channels open. We will better enable clients' access to data, and we will be flexible, modular and faster.

Democratise our teams and capture time zone advantage: Break the gravity of HQ. Strengthen remote onboarding, continue to grow our teams across Canada. Foster productive frontline innovation.

Enable oversight and greater confidence: Support and sustain client oversight in a remote environment – and recognise evolving stakeholder needs.

2021 is shaping up to be a challenging year, but we are confident that with the right focus, an ongoing investment into great people and a clear vision – along with a willingness to continue to ask questions – we can help position our company, client and industry for success.

Automate your corporate actions operational process

IMActions: Supports end-to-end automation of corporate actions and income processing

Mitigate risk and enhance operational efficiency with IMActions offering an extensive range of functional features with global coverage of major events, markets and asset classes. IMActions helps you to increase productivity, improve client servicing and reduce risk by providing real-time monitoring and control.

View real time risk exposure through quantified risk scores based on the complexity and criticality of a corporate action Leverage
automated
processing using
configurable
business rules to
enable staff to
focus on exceptions
and high-risk events

Access to
user friendly
management
dashboard to
prioritize tasks and
view upcoming
events and
deadlines

Available on our managed hosted service, enabling customers to optimize infrastructure and minimize costs

A single code base solution shared by a global client community that drives solution direction and evolution

Mitigate risk | Increase automation | Drive productivity

Learn more: ihsmarkit.com/IMActions



Change is coming



The newly proposed digital asset legislation in Germany is set to strengthen the country as a business location and increase transparency, market integrity and investor protection

Maddie Saghir reports

Cryptocurrencies, which represent a new form of a digital asset based on a network that is distributed across a large number of computers, has been in the limelight for some time now but regulation around digital assets is somewhat lacking.

Experts explain that this decentralised structure allows them to exist outside the control of governments and central authorities. Meanwhile, blockchains, which are organisational methods for ensuring the integrity of transactional data, is an essential component of many cryptocurrencies.

Some in the industry suggest that blockchain and related technology is a disruptor, while others see it as evolutionary rather than revolutionary.



Roles might change in a distributed world, but tasks and responsibilities will still have to be fulfilled in a reliable, scalable and efficient manner



Cryptocurrencies have come under fire a few times with critics saying they can be used for illegal activities, exchange rate volatility, and vulnerabilities of the infrastructure underlying them.

Meanwhile, others have given them praise for their portability, divisibility, inflation resistance, and transparency.

Despite the mixed bag of opinions, there is movement going on with market players introducing new platforms, and existing firms partnering with smaller fintech firms within the digital asset space to expand on their existing services.

One country that has experienced further movement on legislation and regulation in the digital assets space is Germany.

On 1 August the Germany Finance Ministry proposed legislation to modernise German securities law and the associated supervisory law.

With the establishment of digital securities, the German Finance Ministry noted that one of the central components of the Federal Government's block-chain strategy and the joint key issues paper of the BMF and the BMJV on electronic securities will be implemented.

According to the current legal situation, financial instruments that are classified as securities under civil law must be securitised in a document. The proposed regulation also creates regulatory clarity.

It was noted that the Federal Financial Supervisory Authority will monitor the issuance and the maintenance of decentralised registers as new financial services under the eWpG, the KWG and the central securities depository regulation.

The ministry of finance said the draft differentiates between the maintenance of a central electronic securities register by a central securities depository and the maintenance of registers for issuing electronic bonds made possible by distributed ledger technologies, among other things.

The ministry explained: "Adapting the legal framework to new technologies, especially blockchain technology, serves to strengthen Germany as a business location and increase transparency, market integrity and investor protection."

Deutsche Boerse Group, among others, welcomed the draft law on the introduction of digital securities.

Gerd Hartung, head of new digital markets at Clearstream, says: "Digital asset servicing in this context bears great potential to drive automation e.g. via smart contracts, but we expect that this will only fully unfold over a longer period of time because of significant integration efforts for the distribution channels in today's markets."

Meanwhile, a spokesperson from the Federal Financial Supervisory Authority (BaFin) explains that since the proposed legislation aims to introduce the issuance of dematerialised debt securities in accordance with German civil law, BaFin expects the following two items to be the key driver with regard to the potential impact on the asset servicing market:

- Firstly, traditional market participants and issuers will be allowed
 to issue dematerialised debt securities (in particular, bearer
 bonds). In doing so, the draft proposal promotes digitalisation
 for both, capital markets and at the level of each individual market participant while they can rely on existing processes for trading and post-trade services.
- Secondly, the proposed legislation will also foster innovation and the potential use of distributed ledger technology (DLT) for the issuance of dematerialised debt securities which are initially registered with a crypto-security registrar (Kryptowertpapierregister). Thereby, many start-up companies and fintechs located in Germany engage in competition to traditional players based on their expertise in terms of technology and digital processes.

Modernisation

The modernisation in German securities law and the associated supervisory law is something that industry participants are particularly looking forward to.

Clearstream says they appreciate the dematerialisation of German securities and have been promoting it for years previously.

The broad and technology-neutral approach as formulated in the draft bill helps to digitise the whole market and not only niche markets.

"This focus on the whole industry and a regulatory framework for new types of securities (so-called "crypto securities") should be kept and advanced to asset classes other than bearer bonds," comments Hartung.

Meanwhile, BaFin in its role as the supervisory authority will focus on the associated supervisory law. Therefore, associated amendments to the supervisory framework such as the German Banking Act (Kreditwesengesetz) aims to introduce the new financial service (crypto security registrar) and to set prudential requirements which provide further regulatory clarity and guidance with regard to digital securities including crypto-securities.

"From a high-level perspective, BaFin also aims to support innovation and digitalisation. Furthermore, these amendments complement the overarching regulatory framework for crypto-assets," according to a BaFin spokesperson.

New opportunities and challenges

The newly proposed legislation in Germany could create the potential to spur an increase in the number of new digital custody firms, or create a rise in the number of existing custodians expanding their services. However, BaFin highlights that the proposed new financial service (crypto security registrar) should be clearly distinguished from custody services, including crypto-asset custody in accordance with the German regulatory framework.

With reference to Article 7(4) of the proposed legislation, the registrar function as such does not qualify as custody service in the meaning of the German Custody Act.

"Therefore, BaFin expects new firms emerging to apply for an authorisation to provide services as crypto security registrar," comments the BaFin spokesperson.



This focus on the whole industry and a regulatory framework for new types of securities (so-called "crypto securities") should be kept and advanced to asset classes other than bearer bonds



At the same time, BaFin has also noticed that many traditional asset servicing companies argued in favour of an extension to also provide services as a central registrar for electronically issued securities (Zentrales Register).

Hartung highlights that the proposed legislation brings opportunities for the whole industry: be it new entrants, existing custodians or new partnerships between different market participants.

According to Hartung, the legislator has to create a level playing field with clearly defined rules and responsibilities for everybody to have the chance to contribute to the new setup.

"Roles might change in a distributed world, but tasks and responsibilities will still have to be fulfilled in a reliable, scalable and efficient manner. Lots of different solutions in the back office, for example, for custody it might lead to fragmentation in the market and ultimately a lack of scalability and reduced efficiencies," Hartung adds.

Although opportunities are at hand there are still some barriers that could get in the way if the legislation is passed. For example, different laws across Europe would pose additional work for market participants and could prevent real market adoption.

The European Commission published a legislative proposal on Markets in Crypto-assets (MiCA), which would regulate crypto-assets that fall outside the scope of current EU financial market regulation.



We see explicitly a possible overruling by the proposed EU legislation on MiCA and the pilot regime for decentralised market infrastructure.

Mismatches in the positions might hinder or delay investments in infrastructure, as regulatory overruling is a business risk for building new infrastructures As a result, the authorisation process could lead to additional questions or information requests especially with regard to the technical implementation and the interaction with the decentralised ledger and the management of operational risks, according to experts.

A waiting game

While industry experts are optimistic about this new legislation there is still no clear answer on how long this could take to implement.

While the implementation of the law is planned for Q1 2021, it will take time for real and broad market adoption.

Clearstream's Hartung stressed that the broad market adoption of this new legislation will require efforts from all players within the overall financial market ecosystem.

Generally, the adoption of the proposed legislation follows the legislative procedure in Germany.



This means that market participants will have to wait for the final details of the transitional provision with regard to the authorisation in accordance with the German Banking Act.

But could this movement in Germany give other European countries a nudge to update and modernise existing legislation?

Taking into account the digital finance package adopted and published by the European Commission at the end of September, BaFin said it generally supports the initiative to establish a regulatory framework for crypto-assets and the application of DLT in financial markets.

"Hence, BaFin appreciates to actively contribute to the ongoing discussion with other representative bodies of European member states," the spokesperson comments.

Hartung weighs in on this saying that Luxembourg's adoption of digital securities last year was a major impetus for the European financial markets.

"More countries embedding new technology in their financial markets in a sustainable manner will certainly cause others to follow. Germany has to ensure that it doesn't lag behind in the EU whilst lobbying and working towards a common European framework for digital finance," Hartung concludes.

The EC suggested special rules for stablecoins. If adopted, MiCA will replace existing regulatory frameworks applicable to crypto-assets in the EU member states.

The proposal builds on advice received from the European Banking Authority (EBA) and the European Securities and Markets Authority (ESMA).

MiCA, which aims to be technology, asset class and jurisdiction agnostic neutral, allows for the use of both permission-less and permission-based distributed ledger technology (DLT).

"We see explicitly a possible overruling by the proposed EU legislation on MiCA and the pilot regime for decentralised market infrastructure. Mismatches in the positions might hinder or delay investments in infrastructure, as regulatory overruling is a business risk for building new infrastructures," affirms Hartung.

Problems could also arise on the supervisory and applicant side based on the variety of possible and technical implementation of the new crypto securities registrar function.



Take back control of your securities settlement process with intuitive technology and flexible, faster time to market.

Find out more at

bottomline.com/uk/financial-institutions/securities-management





Maximising the benefits of a multi-cloud strategy

While multi-cloud strategies are complex to manage and test, Exactpro's Iosif Itkin says employing the right mix of expertise and tools can ensure firms see the benefits of enhanced resilience, data governance and compliance while managing and eliminating the strategies' downside risks

The cloud is officially mainstream.

According to the Flexera 2020 State of the Cloud Report, more than half of respondents have reached advanced cloud maturity level, with multi-cloud revealed as the dominant strategy, adopted by nearly all of the 750 organisations surveyed. Given the variety of benefits offered by a multi-cloud strategy, this growth is unsurprising, especially within financial services, an industry well-placed to reap the unique benefits the approach delivers.

Resilience and compliance

Combining resources from multiple clouds increases reliability – should one provider fail, firms can shift resources to another cloud provider, an especially

attractive option in financial services, which depends on transaction processing being fully operational. Additionally, the industry has increased its focus on resilience following the market volatility in March and April as a result of the COVID-19 pandemic. For many firms, this has accelerated their digital transformation as they strive to boost resiliency through automation, thereby decreasing the odds of any type of failure or disruption as a result of human intervention. As part of advancing their technology infrastructures, firms will consider a multi-cloud strategy, and given its inherent reliability benefits, the industry is likely to see multi-cloud usage continue to rise.

Beyond resilience, multi-cloud provides attractive compliance benefits to a highly regulated industry. Not only does the approach facilitate more flexible data governance, but an adaptable cloud architecture empowers firms to optimise different security and compliance benefits from a variety of vendors.

66

As part of advancing their technology infrastructures, firms will consider a multicloud strategy, and given its inherent reliability benefits, the industry is likely to see multi-cloud usage continue to rise

"

This promotes best practices for firms while avoiding becoming locked into one vendor, for better or for worse.

The trade-off is complexity. The ability to customise and combine the strengths of several cloud providers results in a more complex cloud architecture, which is more challenging to manage and to test.

An unbreakable link

From a testing standpoint, the technology is essentially the same when using multiple clouds, as are the functional aspects, as in, the system requirements and capability assessments. The difference lies in the non-functional requirements, including performance, latency, failover capabilities, ability to operate under significant load and ability to operate during short load peaks. These non-functional requirements are linked to their environment, and because multi-cloud systems are hybrid, they must be tested as a whole, including business logic, data, gateways and protocols, and application programming interface (API) interactions with both upstream and downstream systems. The inability to separate these testing processes from the cloud technology environment presents a test design challenge as to whether each specific test and/ or test suite is assessing the system or the underlying cloud infrastructure.

To ensure test projects are thorough and robust, quality assurance (QA) teams must validate and verify the entire system, end-to-end. However, in a

multi-cloud environment, differences in security levels, network and access settings create challenges regarding comprehensive test execution performed holistically against system components within different clouds.

Different cloud services may work through proprietary data management APIs, which introduces the need for the testing tools to reconcile the data from components associated with different cloud providers. Additionally, some cloud frameworks allow external interactions with the infrastructure while others require the test automation framework to be placed within and operate through the internal connections. Finally, supported encryption standard creates another variable that must be considered. This high level of variability in requirements creates challenges when performing concurrent actions generally originated by one test automation source across multi-cloud components.

Regulatory challenges

As is often the case in financial services, when the popularity of a particular technology grows, so does the level of regulatory scrutiny. The Financial Conduct Authority (FCA) guidance for firms outsourcing to the cloud and other third-party IT points out that while cloud usage can deliver greater flexibility and enable innovation, it introduces risks, and stipulates that firms cannot delegate responsibility for these risks to the service provider. The guidelines cover topics such as risk management, data security and change management, as well as specify that firms should have an exit plan should they need to terminate their relationship with a provider. Further, the FCA specifies that "where multiple providers form part of an overall arrangement," the guidelines should be applied across the arrangement as a whole.

From a testing standpoint, rules around data security limit the range of possible ways to process text execution data and extract valuable information needed for monitoring and forecasting tasks. Should regulators choose to impose geographic restrictions on multi-cloud use, it can affect the efficiency of internationally distributed QA team operations.

Cost and control

Firms may find a multi-cloud strategy more cost-effective because it allows them to customise services from a variety of vendors competing to offer better services at a lower price point. However, it is important to factor in the cost of high-volume automated testing (HiVAT) performed in the cloud. The test harnesses connected to the platforms in the cloud generate diverse data flows under load, subjecting the system to various intermittent problems, like

66

Enterprises striving for multi-cloud adoption should understand that even for the most experienced external teams, it may not be possible to overcome the difficulties stemming from the delegation of control and responsibility

"

race conditions and data inconsistencies that will not be obvious if we just run tests one by one.

HiVAT is extremely beneficial to financial firms because it uncovers defects in the test environment, as opposed to in production, when a service or solution is under load with many clients depending on its reliable performance. It also opens up the possibility of streamlining the processes not only for the cloud, but for internal development and testing as well. However, the bill from a cloud provider after the cloud-based test environment is strongly stressed with HiVAT can be hefty, and it's a factor worth exploring before making any decisions regarding a multi-cloud strategy.

In addition to cost challenges, there are two key operational hurdles to overcome when testing a multi-cloud strategy: testing team readiness and onboarding. The testing specialists' skillset needs to be highly versatile to ensure they understand the specifics of different cloud technologies and are able to operate infrastructure management solutions for multicloud, using different tools for different cloud services when necessary. Before the start of actual QA activities, the external team needs to undergo a long compliance check process to obtain access to the client's cloud infrastructure. Georestriction policies put in place in the organisation's cloud can result in a third-party QA services provider's offshore team being denied that access.

Enterprises striving for multi-cloud adoption should understand that even for the most experienced external teams, it may not be possible to overcome

the difficulties stemming from the delegation of control and responsibility. In multi-cloud environments, information security, regulatory compliance, and high availability of the infrastructure strongly depend on external parties.

Additionally, emulation of outages on different nodes of the cloud network, as well as their geographical distribution, are controlled by the cloud service provider, not by the client who is (ideally) interested in having their system tested to its limits.

Firms must weigh the benefits of virtual environment diversity, storage, and scalability against the loss of complete control over the quality of the enterprise technology platform as a whole. There is a related, broader benefit – the adoption of cloud environments appears to have driven a better understanding of control over the test environments and the importance of data storage.

Exactpro's way to address these challenges involves two key components: people and tools.

Software testers devising and implementing multi-cloud strategies should be expert at managing distributed components in different cloud environments. In addition, the best are those that work at the intersection of testing, programming, and data analysis.

Looking at tools for testing resilience in multi-cloud environments, Exactpro has built a test automation framework, th2, which addresses several challenges at once. The platform is cloud-ready and supports extensive load testing through multiple iterations so that the client does not have to balance thorough testing with the cost of test runs executed in third-party clouds. This is crucial when a complex system needs constant and regular testing under load. In addition, th2 is tailored for major defect mining activities. It serves as storage for all test execution data and is enhanced with built-in test coverage analytics and compliance reporting capabilities. With a focus on extensive data processing, th2 makes it possible to execute more tests and run them concurrently under load, allowing for data-driven and model-based testing at the point where functional and non-functional approaches converge. The platform consolidates the power of the entire Exactpro test tool suite in a single solution and integrates with a variety of widely adopted test tools and frameworks via its open interface.

In a complex, interdependent industry like financial services, the benefits of a multi-cloud strategy are clear to see. While these strategies are complex to manage and test, employing the right mix of expertise and tools can ensure firms see the benefits of enhanced resilience, data governance and compliance while managing and eliminating the strategies' downside risks.



Canada's Leader in Sub-custody

With more than 1,600 professionals exclusively focused on servicing Canadian investors and global investors into Canada, CIBC Mellon can deliver on-the-ground execution, expertise and insights to help clients navigate the Canadian market. Leveraging the technology and scale of BNY Mellon, a global leader in investment servicing, and the local presence of CIBC, one of Canada's leading financial institutions, CIBC Mellon has the experience and the capabilities to help you succeed in Canada.

Canadian custody and sub-custody Canadian correspondent banking¹ Broker-dealer clearing Securities lending²

¹ Provided by CIBC

Brokerage¹
Investment fund services
MIS (NEXENSM, STP scorecard, trade match report card)
Data analytics²

Learn more, contact: Richard Anton at +1 416 643 5240 Abdul Sheikh at +1 905 755 7118 Lloyd Sebastian at +1 416 643 5437 www.cibcmellon.com

CIBC MELLON

² Provided by BNY Mellon



Saudi Vision 2030 is driving growth in the Kingdom of Saudi Arabia's financial services industry with the market set to stand up tall among its global peers Maddie Saghir reports The Saudi Arabia capital market opened to foreign investors in 2015. While foreign investors could previously access the market through swaps, the inflow into direct equities was a new and welcome phenomenon.

Since then, in a short span of five years, the extent and pace of developments have been very impressive, enriching the market with infrastructure enhancements, enhancements to the regulatory framework, and the introduction of new financial instruments.

With a market capitalisation of \$2.20 trillion, Saudi Arabia is presently ranked among the top 10 exchanges in the world.

Madhur Bhandari, head of securities services, HSBC Saudi Arabia, explains that government debt has also been listed on the exchange platform and access to debt has recently been opened to all categories of investors.

"We have seen new product launches, such as derivatives, the publication of rules issued in relation to securities lending and borrowing, and new market infrastructure in the form of Muqassa as the central counterparty as well as a small and medium enterprise (SME) exchange (ie, the Nomu market)," Bhandari says.

In parallel, he explains that market authorities opened new channels for investors to access the market through the depositary receipt (DR) route enabling new investment into the market and facilitating local companies to access capital overseas. The inclusion of the Saudi market in the emerging markets indices and the diversification of investment opportunities has seen ever increasing flows, and Bhandari suggests this has played a major role in attracting new asset servicing players offering a wide array of products and services in the Saudi capital market.

2030 vision

Saudi Arabia is also working on a new strategic framework, the Saudi Vision 2030, to reduce the country's dependence on oil, diversify its economy, and develop public service sectors such as health, education, infrastructure, recreation, and tourism.

Within its financial sector, the initiative aims to develop a diversified and effective financial sector to support the development of the national economy, diversify its sources of income, and stimulate savings, finance and investment as well as projecting Saudi Arabia as one of the key markets in the Middle East and one of the top ten financial markets in the world.

Just last month, Reuters reported that Saudi Arabia's finance minister said that the Kingdom's Vision 2030 to diversify the economy away from oil has been "tried and tested", particularly during the coronavirus pandemic.

"It proved to be the right plan. The economy was able to actually deal with it (the coronavirus crisis), the government was able to deal with it in a very adequate way," Mohammed al-Jadaan said.

He added that Saudi Arabia's sovereign wealth fund, the Public Investment Fund, was investing to catalyse the private sector, including in the industrial sector.

Developing the financial sector is a "key pillar" of Saudi Vision 2030 whose implementation saw many essential changes and developments, according to Bhandari.

Some of those developments are aimed at increasing the depth of the Saudi market by increasing the number and diversity of listed companies, relaxing foreign investor access to the market, improving corporate governance norms, enhancing investor protection and confidence through appropriate regulations, for example, anti-money laundering (AML) rules, bankruptcy law, and listing and disclosure requirements.

In addition, the introduction of multiple investment schemes and financial instruments has matched various needs of potential investors to access the markets such as foreign strategic investors, qualified foreign investors, the Nomu market, and full access to the debt capital market.

Bhandari explains that all of these initiatives have "effectively made it simpler for investors to invest, and issuers to access capital — a hallmark of what Vision 2030 was meant to achieve".

However, he notes that the market authorities aim to continue to do more in this space.

Office openings

The government's focus on the country's financial services space has attracted new players to the Kingdom of Saudi Arabia.

In July this year, BNY Mellon received conditional regulatory approval to establish a presence and open an office in Riyadh.

Speaking to Asset Servicing Times in July, a spokesperson from BNY Mellon said: "This is an exciting first step to establishing operations in the Kingdom of Saudi Arabia given the significance of the country to the G20 economy, as a centre of capital markets in the region, and home to some of our most sophisticated institutional clients and new opportunities."

But BNY Mellon is not the only big player to have recently enhanced its presence in the country. In August State Street expanded its Middle East presence by opening an office in Riyadh.

Speaking at the time of the announcement in August, Jörg Ambrosius, head of Europe, Middle East and Africa at State Street, said: "Saudi Arabia

itself is a strategically important country for State Street. Having an office here is absolutely vital for us to fulfil our ambitious growth plans for the region."

Movement and growth in the Middle East were predicted last year during the second Arab Capital Markets Conference in Jordan, when Andy Dyson, CEO of the International Securities Lending Association (ISLA), suggested that securities lending could unlock success in the Middle East.

Dyson explained that some of the largest global investors are located within the region and have actively participated in securities lending for many years, yet the regional domestic markets are underdeveloped.

"We have already seen strong and positive moves in this direction within Saudi Arabia, along with the announcement from the authorities in Bahrain earlier this week to allow short selling and lending."

Anthony Habis, head of middle east and Africa, BNY Mellon, explains: "The Kingdom of Saudi Arabia is a significant G20 economy, a centre of capital markets in the region and home to many sophisticated investors and financial institutions."

Businesses are thriving in the Kingdom of Saudi Arabia with home-grown firms increasingly looking to manage the inflow and outflow of capital.

"We work with a wide range of sovereign wealth funds, financial institutions, governments and other clients throughout the region, providing asset servicing and ancillary services, corporate trust and treasury services and have been servicing Kingdom of Saudi Arabia clients for more than 30 years and been conducting business in the Middle East and Africa for over 100 years," explains Habbis.

However, Bhandari explains that the expansion has not been limited to just this year.

Bhandari says: "Movement comes with the completion of all-inclusion phases of Saudi Arabia to the emerging market indices (MSCI, FTSE Russell, and S&P Dow Jones), Saudi Aramco's IPO at the end of 2019 and further relaxations of market access to foreign investors."

"Several capital market firms have continued to expand their focus into the Kingdom and several of them have set up local offices in Saudi Arabia over the past few years," he adds.

Market challenges

The pace of market developments, while welcome in terms of implementing strategy, at times can become a challenge as all market participants may not have the same level of flexibility to adapt to this change at the pace driven by the market.

Bhandari explains: "It may necessitate a reasonable time span from market participants to adapt and digest."

The asset servicing industry in Saudi Arabia has also started expanding since the market opening to foreign institutions in 2015 and is a relatively new industry in the Kingdom.

"While there is a great pool of young and upcoming talent in the Saudi market, it can at times be challenging to find people with deep-rooted asset servicing experience," he notes.

Moving forward

Over the next decade, the Saudi Vision 2030 will continue to drive growth in the country. Bhandari suggests that in turn will result in new opportunities and sectors, new and growing businesses and companies, most of whom will tap the capital markets in some shape and form.

Bhandari notes: "Growth will always look for capital to fund it; there is, therefore, an opportunity for the Saudi capital markets to cater to this through new paper and products to enhance liquidity in existing securities."

"We will continue to see Saudi allocations grow in existing investor books as well as new investors entering the market through the various schemes available in the market."

However, growth is always accompanied by risk in various areas, according to Bhandari, and that is where the market authorities can help identify and mitigate this through various mechanisms, several of which are in the planning stages.

He concludes: "Asset servicing providers and professionals also have a key role to play in this respect. All of this augurs well for all-round growth in Saudi Arabia with the market standing up tall among its global peers."

CEE starts in Vienna



Your Gateway to Securities Services in:

Almaty / Belgrade / Bratislava / Bucharest / Budapest / Kiev / Ljubljana / Minsk / Moscow / Podgorica / Prague / Sarajevo / Skopje / Sofia / Tirana Vienna / Warsaw / Zagreb





Fabrice Tomenko has been promoted to CEO and head of digital trust at Clearstream International S.A., one of many Clearstream entities, based in Luxembourg.

Tomenko, who has worked at Clearstream for 12 years, most recently served as head product development banking funding and financing.

Prior to this, he worked as head business and product development global funding and financing, and before that he was head of collateral management, product management.

Before joining Clearstream, Tomenko worked at BNY Mellon as head of collateral management, operations and client services.

In addition, within the board of directors at Clearstream International S.A., Tilman Fechter has been appointed as chairman of the board.

Fechter, who is also head of banking, funding and financing at Clearstream, has worked at Clearstream for 13 years.



Alter Domus has appointed David Boyd as Cayman country executive to lead the firm's Cayman Islands fund administration, corporate and fiduciary services.

Boyd brings more than 21 years of experience in the Cayman Islands financial services industry, where he has specialised in providing directorships and fund administration services to investment funds, investment management companies and special purpose vehicles.

Most recently, he worked as managing director at Forbes Hare Fund Services. In addition, he served as head of fund services at Appleby Fund Services (Cayman) and director and COO at Butterfield Fulcrum (Cayman).

This new appointment follows Alter Domus' new office opening in the Cayman Islands, which expands its existing presence in North America.

The new office opening will offer a suite of fund administration, corporate and debt capital market services for Cayman Islands structures.

In his new role, Boyd will report to Paul Woods, regional executive North America. Woods

explained that North America is a strategic growth market for Alter Domus.

Woods commented: "The opening of our office under David Boyd's leadership is the next step in expanding our North American footprint and servicing clients whose needs are increasingly global and multi-jurisdictional. With his deep expertise in fund services and his strong understanding of the local market, Boyd is the ideal leader to help expand Alter Domus' presence in Cayman and build a talented team of experts in the year ahead."

Commenting on his new appointment, Boyd said: "Alter Domus is a rapidly growing fund services provider that has developed and maintained close client relationships with asset managers and investors around the world. I am excited to be part of this growth story as we bring Alter Domus' industry-leading technology solutions and alternative investments expertise to the Cayman Islands to help clients navigate the increasingly complex regulatory landscape."



SIX has hired Stuart Kidd as a senior sales manager with a focus on its post trade services, including clearing, settlement and custody.

Kidd is also promoting the exchange's advanced tax services related to securities trading.

He reports to Brendan Bambury, SIX's head of post trade sales for the UK and the Nordics.

Based in London, Kidd has spent the past several years offering consulting work through his own firm, including three years with Commerzbank and then the past eight months with Margin Reform.

He also brings nine years' experience with J.P. Morgan, where he worked primarily in the over-the-counter derivatives business first in the UK, then Australia and Singapore.

Jay Clayton, chair of the US Securities and Exchange Commission (SEC) will be concluding his tenure at the end of this year. After serving more than three-and-a-half years, Clayton will leave the SEC as one of its longest-serving chairs.

During his tenure, Clayton guided the agency through several major global shifts in financial regulation – some of which are still evolving –such as the EU's adoption of the second Markets in Financial Instruments Directive (MiFID) reforms, the transition away from LIBOR, and Brexit.

The timing of Clayton's departure means his replacement will be among the first appointments made by the incoming president Joe Biden, who will enter The White House on 20 January 2021.

As the prospect of multiple viable vaccines to COVID-19 is now possible in the near-term, the next chair will be tasked with overseeing the largest capital market recovery effort since the 2007/08 global financial crisis.

The SEC says Clayton was responsible for strengthening the commission's enforcement programmes, navigating changes in the markets and the COVID-19 pandemic and also led efforts to promote diversity, inclusion and opportunity in the workplace.

During Clayton's tenure, the commission obtained orders for over \$14 billion in monetary remedies, including a record \$4.68 billion in fiscal year 2020, and returned approximately \$3.5 billion to harmed investors.

In addition, the commission paid approximately \$565 million to whistleblowers, including the largest single award in the programme's history (\$114 million) which was given out earlier this year.



Prior to joining the commission, Clayton was a partner at Sullivan & Cromwell where he was a member of the firm's management committee and co-head of the firm's corporate practice. From 2009 to 2017, Clayton was a lecturer in law and a professor at the University of Pennsylvania Law School.

Prior to joining Sullivan & Cromwell, Clayton served as a law clerk for the Honorable Marvin Katz of the US District Court for the Eastern District of Pennsylvania and was a member of the New York and Washington, DC bars.

Clayton comments: "I am proud of our collective efforts to advance each part of the SEC's tripartite mission, always with an eye on the interests of our main street investors.

"The US capital markets ecosystem is the strongest and most nimble in the world, and thanks to the hard work of the diverse and inclusive SEC team, we have improved investor protections, promoted capital formation for small and larger businesses, and enabled our markets to function more transparently and efficiently."

Clearwater Analytics has hired FIS' former head of sales for collateral and securities finance software to lead the sales effort for its new pensions segment.

Clearwater Analytics is a cloud-based software-as-a-service fintech that provides automated investment accounting, performance, compliance, and risk reporting for insurance companies, asset managers, corporations, banks, governments, and other institutions.

Christian Bullaro has now joined as a sales director with a mandate to spearhead its push into the pensions space by building a new team that will promote Clearwater's books and records offering to both public and corporate funds.

Speaking to AST, Bullaro said that Clearwater sees "a natural expansion into the pensions space as the next step in the process".

Based in New York, he will report to Scott Erickson, Clearwater's COO.

Bullaro joins Clearwater from Finastra where he was head of capital market sales for North America for just over a year.

Before that he served as managing director, head of enterprise software sales, for data analytics and financial services provider firm S3.

Between 2013 and 2018 he was FIS' head of sales for collateral and securities finance software.

His CV also includes an eight-year stint as J.P. Morgan's head of sales and relationship management for derivatives and cash collateral for North America.

Options Clearing Corporation's (OCC) David Prosperi has retired as senior vice president, communications, after just under six years with the equity derivatives clearinghouse.

He will be replaced by Michael Shore who joined OCC in January. Shore is leading the communications function and reporting to Julie Bauer, who oversees the entire OCC external relations team. Prosperi's more than a three-decade long career in senior communications roles took him from The White House, through two presidential campaigns, and three cabinet-level agencies, before he arrived at the Chicago-based clearing house in 2015.

At OCC, Prosperi was responsible for all external and internal communications for the world's largest equity derivatives clearing organisation during the pivotal years when wider market awareness and understanding of the role of central counterparties (CCPs) was still developing.

He reported to the executive chairman Craig Donohue and worked directly with CEO John Davidson to lead the rebranding initiative that began in 2018.

Prosperi's communications career began in 1979 as a press aide for the 1980 Reagan presidential campaign. During that period he travelled with governor Reagan on the campaign trail and worked with acclaimed political PR guru Lyn Nofziger.

Prosperi went on to become assistant press secretary at The White House from 1981 to 1982.

From there, he held a series of senior public sector roles before returning to his hometown of Chicago in 1990 to serve at the Chicago Board of Trade as senior vice president and assistant to the CEO — a role he held for 13 years.



Next was CME Clearing where he first met and worked directly with Donohue, then CME's CEO, for four years, including throughout CME's merger with Prosperi's prior employer in 2007, to become CME Group.

From June 2008 until joining OCC, Prosperi led the global public relations activities for Aon, the risk management and human capital advisor. This included all external communications related to Aon's global partnership with the English football club Manchester United.

Displaying a shrewd acumen for when to leave on a high, Prosperi followed United manager Alex Ferguson's lead and left the club and Aon in 2015 for OCC.

"I really enjoyed my experience at OCC and the opportunity to work again with Craig Donohue and with some very smart people who have an impact every day in global financial markets," said Prosperi.

"I would like to believe I helped move the needle for OCC in terms of how the organisation is perceived today in the marketplace, and that there is greater awareness and understanding of the vital role it plays as a CCP for the users of the US exchangelisted options markets."



THINK INDIA. THINK STOCKHOLDING.

For all your Custody & Sub-Custody Needs - Onshore and at IFSC#

- Deepest Local Expertise
- Highest AUC* & Volumes
- Longest track record
 (3 decades of experience)
- Servicing multiple asset classes& Customer Segments
- Open Architecture, Flexibility & Tailor-made Solutions
- Following highest compliance& Best Practices

CONSISTENT AWARD-WINNING PERFORMANCE & RECOGNITIONS

#International Financial Services Centre, GIFT City - India

*AUC USD 539 Billion (as on 30th November' 2018)



2016, 2017 & 2018



2016, 2017 & 2018