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Central Bank Payments News™

PAYMENTS NEWS FOR THE CENTRAL BANK COMMUNITY

FEATURED ARTICLE

CoDi: An Evolution of Mexico's Main Payment System

Banco de México's Miguel Díaz Díaz introduces CoDi, a new paradigm for retail payments in Mexico

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INDUSTRY PROFILE

bluechain

GOING CASHLESS: WHAT ARE THE BARRIERS?

Currency Research | The World's Resource for Currency Knowledge

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Contributors

Lindsay Boulton
Assistant Governor (Business Services), Reserve Bank of Australia

Miguel Díaz Díaz
Director of Payment Systems, Banco de México

Rui Pimentel
Head of Unit, Payment Systems Department, Banco de Portugal

Julio C. Pando
Means of Payment Deputy General Manager, Banco Central de la República Argentina

Stephen Bedggood
Head of Product Management, Bluechain Payments Ltd

Ghana Completes Financial Inclusion Triangle

Phase II of Ghana's ambitious Mobile Money Interoperability platform initiative was rolled out on 28 November. Phase II allows the country's businesses and consumers access to a seamless and universal flow of transactions across mobile money platforms, banks, and the national E-zwich smart card payment platform – known as the "Financial Inclusion Triangle." Ghana Interbank Payment and Settlement Systems (GhIPSS) was tasked by the Government to lead the project. Phase I, launched in May, involved integrating mobile money accounts with Ghana's National Switch system (gh-link), the system used by GhIPPS to connect financial institutions and third-party payment service providers. Since the launch of Phase I, the total transaction value and volume in the country has increased from GH¢8.3 million and 96,907 respectively in May 2018 to GH¢32.6 million and 319,094 respectively in September 2018, representing a respective growth of 292.8 percent and 229.3 percent in value and volume. At the Phase II launch, Bank of Ghana Governor Ernest Addison remarked, "This is undoubtedly another major milestone in our quest to deepen financial intermediation and inclusion; while digitizing the economy and levelling the playing field for both the banked and unbanked." For more information about payments transformation in Ghana, see the feature story in our September issue.

Singapore Unveils New Payments Bill

After passing through two rounds of public consultations, the **Monetary Authority of Singapore** (MAS) announced it has finalised the new proposed regulatory framework for Singapore's payment services. The Payment Services Bill, submitted to Parliament and tabled in late November, allows for greater innovation in payments but also ensures that potential risks are effectively mitigated. The Bill streamlines the regulation of payment services by combining and expanding on the provisions in the Money-Changing and Remittance Businesses Act (1979) and the Payment Systems (Oversight) Act (2006).

Two parallel regulatory frameworks shape the Bill: one framework enables MAS to regulate systemically important payment systems and the other entails a licensing regime focused on retail payment services. Digital payment token services such as bitcoin will now be regulated, with the Bill also covering services for account issuance, domestic and cross-border money transfer, merchant acquisition, e-money issuance, and money-changing. MAS anticipates that the Bill will be enforced in 2019, with a compliance grace period of 12 months for payment services providers and six months for digital payment token services.

Bank of Russia Forges Cyber Security Alliance with Eurasian Regulators

Information sharing is at the front line of the ongoing war against cyber threats. A recent cooperative arrangement saw the **Bank of Russia** (BoR) and **National Bank of the Kyrgyz Republic** signing off on a common information security agreement. Similar agreements have been arranged with regulators in the Republics of Kazakhstan, Armenia, and Belarus. "Building the common financial market of the Eurasian Economic Union goes hand in hand with the development of digital financial technologies. As a result, there emerged the need for a common effective cyber security system under the aegis of financial regulators of EAEU member states," said Artyom Sychev, First Deputy Director of the Information Security Department at Russia's central bank. The agreements outline a response protocol to identified security threats, with BoR's Financial Sector Computer Emergency Response Team (FinCERT) responding to cyber attack alerts and analysing malicious software, advising on ATM attacks, and redelegating phishing resource domains.

European Commission Proposes Initiatives to Strengthen Euro

On 5 December 2018, the **European Commission** (EC) put forth various proposals to strengthen the role of the euro in the world economy. EC called on Member States to promote the wider use of the euro in certain key sectors, noting that European businesses continue to trade in the US dollar in key strategic markets, often even between themselves. This exposes European businesses to currency and political risks, including from unilateral decisions that directly affect dollar denominated transactions.

A number of initiatives have been proposed to foster a deep European financial sector and stronger European financial market infrastructures. These include solid interest rate benchmarks, providing technical assistance to improve access to the euro payment system by foreign entities, and an integrated instant payment system in the EU. Pierre Moscovici, Commissioner for Economic and Financial Affairs, Taxation and Customs said, “A wider use of the euro in the global economy yields important potential for better protecting European citizens and companies against external shocks and making the international finance and monetary system more resilient.”

Bank of England ISO 20022 Consultation Wins Industry Approval

In June, the **Bank of England** (BoE), in conjunction with **Pay.UK** (formerly the New Payment Systems Operator) and the Payment Systems Regulator (PSR), launched a six-week consultation on the adoption of the ISO 20022 messaging standard for UK payments. BoE published the consultation response paper on 29 November. More than 70 responses were received from a range of industry stakeholders, from incumbent banks and fintechs to trade associations representing the payments industry.

Victoria Cleland

Victoria Cleland, BoE’s Executive Director, Banking, Payments and Financial Resilience said, “We were delighted with the breadth of responses from the payments industry, which has helped us to refine and enhance our approach for adopting ISO 20022.” The majority of respondents were supportive of the consultation paper’s proposals, including the introduction of the Common Credit Message (CCM) to harmonise messaging among the UK’s main interbank payment systems (CHAPS, Faster Payments, and BACS). In related news, BoE and Pay.UK recently issued a call for interest to industry players wishing to join a newly created Standards Advisory Panel, which will focus primarily on ISO 20022 implementation.

European Update

EU Blockchain Roundtable Boosts Blockchain Leadership

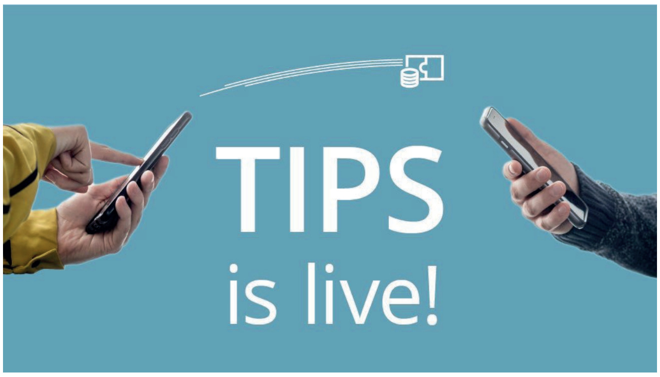
Europe is taking proactive steps to boost innovation and exploitation of blockchain technologies across the continent and globally. On 20 November, industry leaders and startups convened for the EU Blockchain Industry Roundtable event, hosted by the **European Commission** (EC). Up for discussion was the development of a comprehensive strategy to foster the development and deployment of blockchain technologies. True to the event's name – Bringing Industries Together for Europe to Lead in Blockchain Technologies – participants agreed to work with Governments and the EC to deploy blockchain solutions and establish Europe as a leader in the field.

The new **International Association for Trusted Blockchain Applications** (IATBA), to be headquartered in Europe, was announced during the event. The association will welcome "any organisation willing to work on the deployment of blockchain and distributed ledger technologies to transform digital services." IATBA members will work closely alongside the EC, as well as the EU Member States that have joined the 27-member European Blockchain Partnership (EBP). Among the aims of the association are promoting interoperability, developing specifications and standards, and working towards regulatory convergence to advance the deployment of blockchain technologies.

According to Roundtable hosts, the EC Commissioner for Digital Economy and Society, Mariya Gabriel, and the EC Director-General for Communications Networks, Content and Technology, Roberto Viola, "What makes this association special is its focus on promoting trust in blockchain technology among public authorities and citizens. This association can also now become a natural interlocutor for all the regulators at EU and national level, for instance on standards and regulation. It will also be able to communicate with citizens about blockchain, a technology which should not be associated with obscure cryptocurrencies but with transparency, traceability and a secure environment."

Instant Payments Service Goes Live in Europe

On 30 November 2018, the **European Central Bank** (ECB) announced that consumers could begin making retail payments across Europe instantly, taking advantage of the new TARGET Instant Payment Settlement (TIPS) capability. As discussed in October's feature story by ECB's Marc Bayle de Jessé, TIPS ensures that the money in an instant payment is made available within seconds on the account of the recipient, 24 hours a day, 365 days a year. The service settles payments in central bank money. To ensure that instant payments are reachable across Europe, TIPS is based on the pan-European SEPA Instant Credit Transfer (SCT Inst) scheme and was developed as an extension of the ECB's TARGET2 RTGS system, which boasts a large number of participants across the continent.



The first transaction took place immediately upon the 30 November launch of TIPS, "when a client of the Spanish bank, CaixaBank, used TIPS to make an instant payment to a client of the French bank, Natixis." Currently, France, Germany, and Spain have connected to the TIPS service, and the ECB is encouraging others to follow suit. The ECB highlights an attractive price for the service, which is offered on a "full cost recovery" basis.

TIPS has no entry or maintenance fees for account holders. The price for banks per initiated transaction is set at €0.002 for the first two years of operation, with no charges for the first ten million payments settled on each TIPS account by end-2019. The ECB is encouraging banks across Europe to follow the lead of early adopters and to link to the TIPS platform to develop "user-friendly solutions that support the take-up of instant payments by appealing to both retailers and consumers."

At a Glance

Card Schemes

Egypt's National Payment Card Rolls Out Soon

Ayman Hussein, CBE

As part of its work to expand financial inclusion, the Central Bank of Egypt (CBE) has been focusing on enhancing financial access through a range of "simple banking services" (see CBE's 2016-2017 Annual Report). During the opening session of the recent People and Banks Conference in Cairo, CBE's Sub Governor of Payment Systems and Business Technology Sector Ayman Hussein touched on developments in this space. Most notably, a new national card scheme, the Meeza Card, is set roll out this month. According to the Sub Governor, CBE hopes to issue 20 million Meeza cards over the next three years. Mobile phones are also playing a significant role in increasing financial inclusion in Egypt, he noted, with mobile banking accounts reaching the 11.5 million mark by end-September 2018. Further to this, Hussein noted that CBE has been investigating a possible CBDC.

CBDC, Blockchain, and Cryptos

G20 Adopts FATF Standards on Crypto Assets

During its Buenos Aires meeting in early December, the G20 issued a joint statement agreeing with the regulatory approach to crypto assets recently laid out by the Financial Action Task Force (FATF). Section 25 of the joint statement indicates that "We will step up efforts to ensure that the potential benefits of technology in the financial sector can be realized while risks are mitigated. We will regulate crypto-assets for anti-money laundering and countering the financing of terrorism in line with FATF standards and we will consider other responses as needed."

Kenya Blockchain Taskforce Ready to Release Report

The Kenya Blockchain Taskforce, formed by the Kenyan Government in late February, is ready (video) to release its much-anticipated report. The 11-member group (video) was asked to make recommendations on how the Kenyan government can leverage emerging technologies over the next half-decade and up to the year 2032. In line with the growing trend, the report recommends an investigation into the possible development of a central bank digital currency, as well as a nationwide digital identification platform. Running at 192 pages, the report is currently in the hands of Kenya's Cabinet Secretary for ICT before its final release to the public.

Thai Governor: No Retail CBDC for 3-5 Years

Thailand does not plan to switch from cash to a CBDC in the near future. In the wake of IMF Managing Director Christine Lagarde's much-discussed speech on CBDCs, Bank of Thailand (BOT) Governor Veerathai Santiprabhob asserted that the nation will not implement a general purpose digital currency for at least three to five years. However, Project Inthanon, BOT's wholesale central bank digital currency initiative announced last June, will likely reach full implementation by early 2019. As reported by the Thai News Agency, factors cited for the cautious approach include the complexity of implementation, the need for public education and awareness, and ensuring the efficiency of the technology.

Saudi Arabia and UAE Preparing Joint Digital Currency

Saudi Arabia is getting ready to launch a digital currency in collaboration with the United Arab Emirates. Mohsen Al Zahrani, Head of Innovation at the Saudi Arabian Monetary Authority (SAMA), shared details about the initiative with the Saudi Press Agency in late November. The new CBDC will not replace fiat currency, operating instead solely as a wholesale cross-border payment method for banks in the two countries. Speaking to Saudi news outlet Argaam, Governor Mubarak Al-Mansouri of the Central Bank of the United Arab Emirates said the new digital currency is now in the design phase with an anticipated release date of mid-2019.

Crypto's 'Dr. Doom' Weighs in on Digital Currencies

The crypto world's bête noire, New York University (NYU) Stern School of Business Economist and Professor Nouriel Roubini, has weighed in on CBDCs and cryptos. Known as "Dr. Doom" to crypto enthusiasts, Roubini adds his voice to the growing chorus of industry leaders and global experts urging central banks to research CBDCs. Roubini's salvo, Why Central Bank Digital Currencies Will Destroy Cryptocurrencies, follows the now ubiquitous Winds of Change speech recently delivered by the IMF's Christine Lagarde. Roubini argues that CBDCs deserve serious consideration, as they hold the potential to replace "an inherently crisis-prone banking system and [would] close the door on crypto-scammers." He further observes that if a CBDC were to be issued, "it would immediately displace cryptocurrencies, which are not scalable, cheap, secure, or actually decentralized."

Cross-Border

China and Russia Plan Cross-Border Payments

Iran isn't the only nation seeking to circumvent sanctions to maintain payments flows. Russia's state-funded television network, RT, reports that China and Russia are in talks to launch a new cross-border system for direct payments in the ruble and the yuan. While on an official visit to China in November, Russian Prime Minister Dmitry Medvedev said, "No one currency should dominate the market, because this makes all of us dependent on the economic situation in the country that issues this reserve currency, even when we are talking about a strong economy such as the United States." Initial discussions on co-badging China's UnionPay credit card and Russia's national Mir card commenced in late 2017.

EU Recognises Vatican Financial System

Payments are about to become more streamlined for the world's smallest state. The Board of the European Payments Council (EPC) recently approved an extension of the geographical scope of the Single Euro Payments Area (SEPA) to include Vatican City State and the Holy See. As the National Catholic Register reports, as EPC made this decision with the European Commission's consent, the Vatican's financial system has now been formally recognized by the EU as both autonomous and independent. The move is expected to take place in March 2019. René Bruelhart, President of the Vatican Financial Intelligence Authority, said "the successful application of SEPA is a very positive sign. It helps to facilitate payments and harmonizes such services. Furthermore, it demonstrates the Holy See's efforts to enhance financial transparency."

Lithuania Opens Payments Gateway Between China and EU

LIETUVOS BANKAS
BANK OF LITHUANIA

Payments news continues to stream out of Lithuania with the Bank of Lithuania (BL) recently issuing an e-money license to Chinese payments firm, Paytend Technology. The license will allow Paytend to issue e-money and provide payments services. The firm's successful application was facilitated by a process BL introduced this summer allowing foreign players to remotely apply for e-money licenses. Five Chinese companies have received e-money licenses from the country's central bank to date, opening a healthy payments gateway between China and the European Union. According to Mantas Katinas at Invest Lithuania, the country is already home to more than 120 fintech companies.

Special Purpose Vehicle for Iran in Doubt

As reported in October's CBPN, a "Special Purpose Vehicle" (SPV) was being developed by Europe and Iran to blunt the impact of US sanctions on the latter. The SPV would offer a compensation function so a European exporter of goods to Iran would be able to accept payment from a European importer of goods from Iran, eliminating the need for cross-border transactions. The plans were announced in September, with operations expected to go live as early as the end of October. As of early December, however, developments were murky. Iranian Foreign Ministry spokesman Bahram Ghasemi indicated to local media that the Iran-EU trade mechanism (expected to be operated by either Germany or France) had been delayed due to US pressure on European countries. Speaking a couple of days later, Foreign Minister Mohammad Zarif indicated that the EU had said final arrangements were in progress for the SPV, and the function would be operational in the near future.

Cyber Security

ECB Publishes Cyber Resilience Expectations for FMIs

Based on global best practices detailed in the 2016 CPMI-IOSCO report, the European Central Bank (ECB) has laid out the Eurosystem's expectations for cyber resilience. On 3 December, the final version of the cyber resilience oversight expectations (CROE) for financial market infrastructures (FMI) was published. The CROE document incorporates feedback from a public consultation and serves three key purposes: 1) it provides FMIs with detailed steps on how to operationalise the guidance, ensuring they are able to foster improvements and enhance their cyber resilience over a sustained period of time; 2) it provides overseers with clear expectations to assess FMIs under their responsibility; and 3) it provides the basis for a meaningful discussion between the FMIs and their respective overseers. At the recent meeting of the Euro Cyber Resilience Board for pan-European Financial Infrastructures, Member of the Executive Board Benoît Cœuré said, "The central banks of the Eurosystem will work closely with the various financial infrastructures to enhance their cyber resilience, with the CROE serving as a good basis for this work."

Monetary Authority of Singapore Announces Cyber Grant

On 3 December, the Monetary Authority of Singapore (MAS) announced a new S$30 million Cybersecurity Capabilities Grant. The grant was created to strengthen the cyber resilience of Singapore's financial sector and to assist the city state's financial institutions in upskilling workforces for cyber preparedness. The grant will also be applied towards the establishment of global or regional cybersecurity centres of excellence within Singapore's financial institutions. "The Singapore financial sector has made significant progress in recent years in building up cyber resilience and managing cyber risk," said Tan Yeow Seng, Chief Cyber Security Officer at MAS. "But the cyber threat landscape continues to evolve and we have to constantly strengthen our cyber capabilities. The Cybersecurity Capabilities Grant will support financial institutions in advancing their cybersecurity technology and manpower needs."

State Bank of Pakistan Amps Up Security Guidelines

In light of a recent high-profile cyber incident, the State Bank of Pakistan (SBP) has refreshed its digital payments security guidelines. The guidelines are intended to more effectively safeguard banks and consumers from fraudulent activity and cyber attacks. The new directives, issued in late November, instruct the nation's banks and microfinance banks (MFB) to conduct in-house and third-party security audits to identify and remove potential vulnerabilities. Failure to comply, as stated in the directive, "will lead to penal action by SBP including but not limited to the suspension of non-compliant digital payment products and services of the banks/MFBs."

Financial Inclusion

Palestine Unveils National Financial Inclusion Strategy

The Palestine Monetary Authority's National Financial Inclusion Strategy (NFIS) was officially launched on 2 December, in cooperation with the Alliance for Financial Inclusion (AFI). The NFIS aims to increase the level of financial inclusion in the Palestinian state from the current 36.4 percent to at least 50 percent by end-2025. Two key areas of focus in the strategy, as mentioned by AFI CEO Dr. Alfred Hannig, are Forcibly Displaced Persons (FDPs) and Women's Financial Inclusion. Palestine is the second jurisdiction, after Jordan, to launch the NFIS since the Financial Inclusion for the Arab Region Initiative (FIARI) was established in 2017.

Senegal to Digitise Payments for Inclusive Development

The West African nation of Senegal has been making significant strides in its financial inclusion journey, seeing banked adults rise from just 5.8 percent in 2011 to 20.4 percent in 2017. Now the country is turning its sights to the digitisation of payments. A new report jointly published by the Senegalese Government, Better Than Cash Alliance, and the UN's Mobile Money for the Poor (MM4P) programme calls on the country's payments ecosystem actors to mobilise more resources to make further progress in the digitisation of the financial sector. To drive this transition, the report emphasises the need for an inter-governmental body open to regulators and the private sector to coordinate all actions. Senegal's Prime Minister estimates that these efforts can contribute to GDP growth of 160 million euros annually.

Fintech

BRICS Leaders Identify Collaborative Fintech Opportunities

The South African Government's National Treasury has published the 2018 BRICS Finance and Central Banks Outcomes Document (the 'Outcomes Document'). A collaborative undertaking of the BRICS Ministers of Finance and Central Bank Governors (FMCBGs), the document takes stock of the outcomes achieved under the theme, BRICS in Africa: Collaboration for Inclusive Growth and Shared Prosperity in the 4th Industrial Revolution. This year's outcomes focus on enhancing collaboration in infrastructure and financial cooperation and include a BRICS FinTech Stocktaking Exercise. Conducted to enhance the exchange of views on financial technology, cyber security, and crypto assets, the exercise identified a number of areas where BRICS countries can further improve collaboration in the fintech space.

Swiss Federal Council Provisions Push Fintech Innovation

Starting in the new year, Swiss companies operating beyond the core activities characteristic of banks will be permitted to accept public funds up to a maximum of CHF 100 million, subject to simplified requirements. In late November the Swiss Federal Council brought into force a corresponding amendment to the Banking Act to promote innovation in the financial sector and to remove barriers to market entry for fintech firms. The new provisions are the third and final measure of the Council's 2017 consultation process, with the previous two – extension of the holding period for settlement accounts and an authorisation-exempt innovation area (sandbox) – already in force as of August 2017. The Swiss Financial Market Supervisory Authority (FINMA) will be responsible for granting the new fintech licenses and has published guidelines aimed at simplifying the application process.

Guidelines and Regulations

SARB to Update Payments Regulatory Framework

South Africa is looking at ways to update its national payment system to reflect the emergence of new payment methods and players. The South African Reserve Bank (SARB) and the National Treasury published a policy paper – the Review of the National Payment System Act 78 of 1998 – on 5 December, which is now open for public comment. The review, as SARB notes, is aligned with the global trend of regularly reviewing perimeters of regulation to strengthen them or, where necessary, extend the regulatory net to previously unregulated sectors of the economy. Comments on the policy paper will be welcomed until 28 February 2019.

Infrastructure

Kuwait Maps Future Plans for Payment System, Digital Currency

Central Bank of Kuwait Governor Dr. Mohammad Y Al-Hashel recently outlined a number of the country's planned payments strategies in a 27 November keynote address. The keynote touched on the many payments initiatives currently underway in Kuwait, and provided details on the Kuwait National Payment System (KNPS), a "strategic mega project" under development in tandem with with local banks and payment gateways. KNPS will be be rolled out in two phases over 2019 and 2020 and will include initiatives such as the Government Electronic Banking System, Wages Protection System, Digital Currency, and the Automated Clearing House. The initiatives are intended to future-proof the financial system, and in the case of digital currency, will provide the necessary infrastructure should CBK progress with a CBDC.

Instant Payments

Croatia's Domestic Instant Payments Solution in Development

In addition to onboarding with the ECB's new TIPS service, the Croatian National Bank (CNB) is developing a homegrown instant payments solution that will settle in the local currency. At a recent industry event in Zagreb, CNB's Executive Director of the Payment Operations Area, Ivan Biluš, shared that the Croatian banking community, with assistance from CNB, has launched a project to develop an instant payments platform using the kuna. The service is anticipated to be ready for launch by end-2019.

Riksbank Mulls Joining TIPS Service

Sweden is considering changes to its national payment system, primarily due to the nation's declining cash usage and lack of a domestic card network. In her 22 November speech at the SNS Finance Panel in Stockholm, Riksbank Deputy Governor Cecilia Skingsley noted that the domestic market is "completely dominated by Visa and Mastercard and much of the infrastructure is located outside Sweden's borders." The Riksbank is currently weighing the advantages of adjusting or complementing its current large-value payments system ("RIX") so it can safely and efficiently handle instant payments. One possible solution, previously subject to consultation in June 2018, is joining the ECB's newly launched TARGET Instant Payment Settlement Service (TIPS). Skingsley notes, however, that a domestic back-up would be likely needed and the e-krona could potentially be paired with it as a complementary payment method. The Riksbank's prestudy regarding TIPS adoption was announced on 6 December, and aims "at further investigating the conditions for TIPS as a settlement platform for instant payments in central bank money in SEK."

Instant Payments Now Available in Romania

Transfond, the administrator and operator of Romania's Automated Interbank Payments Clearing House, launched a new instant payments system for the nation's banks on 10 December. Interbank transfers will now take just a few seconds. According to local media (link in Romanian), Transfond Project Manager Bogdan Nastase has said that two local banks are now ready to implement the new solution, while another will start in March 2019.

Samoa Working on Instant Payment System

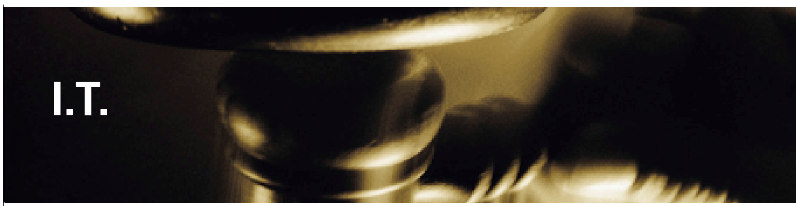
Samoa is working on a major revamp to its payment system. Governor Maiava Atalina Ainu'u-Ena of the Central Bank of Samoa (CBS) told local media that CBS is working to develop an instant payments system in collaboration with the World Bank. Following the 33rd Annual Pacific Central Bank Governors meeting in held in Samoa from 14-16 November, Governor Maiava told the Samoa Observer that while the Bank is not considering a digital currency, instant payments are on the table. "Central bank digital currency was one of the issues discussed during the Governors meeting," said Maiava. "The consensus was we are not desperate and we are not there yet, we are working on our payment so that would be a real time settlement. So that in itself will address any need for a digital currency because once you have a payment system that is real time settlement, you can clear anything at that very moment." The legal framework for the new platform is already in place – 2014's National Payment System Act – and the World Bank will act as a regulator in the development and implementation process.

SWIFTNet Instant Messaging Service Goes Live With TIPS

Coinciding with the official launch of the ECB's TIPS service, SWIFT announced the successful implementation of its messaging service for TIPS, SWIFTNet Instant. According to the 30 November press release, the solution enables instant payments within the Single Euro Payments Area and has been designed as a key building block for accessing the future Eurosystem Single Market Infrastructure Gateway (ESMIG). ESMIG's next milestone will be in 2021 with the technical consolidation of TARGET2 and Target2-Securities.

Transferwise Gains Access to Lithuania's Instant Payments System

In April 2018, Estonian money transfer service Transferwise become the first non-bank to gain settlement account access to the Bank of England's Real Time Gross Settlement (RTGS) system. More recently, in late November, Transferwise garnered another first, becoming the first non-bank to gain access to a euro area central bank payments account. Transferwise has opened a euro account with the Bank of Lithuania, which means that euro transfers moving through this account occur in real time by leveraging BL's participation in the Single Euro Payments Area (SEPA) instant credit transfer scheme.



UK Treasury Committee to Investigate Network Failures

As recent headlines have shown, network failures in the financial services industry can be disastrous for consumers and payment services providers alike. As society moves away from cash and becomes more reliant on digital payment methods, these failures are coming under closer scrutiny. The UK Parliament's Treasury Committee is looking into ways to safeguard against such failures and has recently launched an official inquiry into IT failures in the financial services sector. The Committee plans to examine how the country's financial services institutions are guarding against service disruptions and will look into levels of responsiveness and operational resilience in cases of service disruption. Until 18 January the Committee is accepting evidence to support the inquiry through its evidence portal or via email at Treascom@parliament.uk. A Specialist Advisor will be appointed to provide analysis for

Angola to Launch Mobile Payment System in 2019

The National Bank of Angola (Banco Nacional de Angola – BNA) has confirmed its plans to launch a mobile payment system in 2019. Speaking at the 8th Meeting on Payment Systems of Central Banks of the Community of Portuguese Speaking Countries (VIII Encontro de Sistemas de Pagamentos dos Bancos Centrais dos Países de Língua Portuguesa), Director Pedro de Castro e Silva declared, "We are one of the best-positioned countries in SADC. We have always been concerned about financial inclusion, just as it is with other countries, we think it is now with the use of mobile phones that we can promote financial inclusion." Work on the initiative started in March 2018, with the country's central bank collaborating with the World Bank to draft legislation to authorize mobile payments in the country. The meeting (link in Portuguese), held in Luanda, was attended by the Central Banks of Angola, Cape Verde, Mozambique, Portugal, São Tomé and Príncipe, East Timor, and Macau.

Open Banking

Open Banking Coming to Bahrain

On 6 December, the Central Bank of Bahrain (CBB) issued its final set of rules on a new open banking regime in the Kingdom. Mr. Khalid Hamad, CBB's Executive Director of Banking Supervision, remarked that "the open banking initiative will have a significant positive impact on the quality of services offered to consumers in the Kingdom and will give the financial sector in the Kingdom a competitive edge in the Middle East." The open banking rules were finalised following a consultation in early November.

Bank of Lithuania Consults on Open Banking

In the Bank of Lithuania's ongoing efforts to promote innovation in the banking sector, a public consultation on open banking has been initiated. The aim, according to the Bank, is to "find out the opinion of current and future financial market participants and other stakeholders about the need and conditions for Open Banking in Lithuania." The Bank is accepting stakeholder opinions, to be submitted by email via the Bank's questionnaire, until 25 January 2019.

Dutch Senate Approves Transposition of PSD2

The Dutch Senate approved the legislative proposal transposing the EU's Second Payment Services Directive (PSD2) into national law in the Netherlands. The long-anticipated approval was granted on 4 December; PSD2 is expected to be implemented by 1 January 2019.

Remittances

CENFRI Identifies Barriers to Formal Remittance Channels

Over the last decade, the payment system aspects of international remittances have increasingly become a concern for a number of global central banks. Informal remittance flows and barriers to accessing formal remittance channels pose a challenge to true financial inclusion in many regions. In response to this, a multi-volume collaborative report from the Centre for Financial Regulation and Inclusion (CENFRI) and Financial Sector Deepening Africa (FSD Africa) unpacks why migrants in sub-Saharan Africa (SSA) underuse formal remittance corridors and the various reasons why informal mechanisms are often preferred. Volume 5 of the joint report, released in late November, explores the state of the remittance sector in Côte d'Ivoire. The forthcoming Volume 7 will conclude with recommendations on necessary policy actions in the SSA region and multi-country approaches for remittance players.

Sandboxes

A New Fintech Regulatory Sandbox Framework for Kuwait

The Central Bank of Kuwait (CBK) has set up a new Regulatory Sandbox Framework for fintech firms to experiment with new payments services. CBK Governor Dr. Mohammad Y. Al-Hashel announced the initiative on 26 November, remarking that "the main objectives of the regulatory sandbox framework are to provide a safe environment to test proposed products and services related to electronic payment operations, and to encourage financial innovations by temporarily easing participants' from part of the regulatory and supervisory requirements including the need for required permits." The sandbox is part of CBK's larger efforts to welcome innovative new financial products and services into the Kuwaiti economy while also safeguarding consumers.

Poland Develops Regulatory Sandbox Programme

Over recent years the Polish Financial Supervision Authority (KNF) has been tasked with a number of activities to support financial market innovation, including the launch of a Special Task Force for Financial Innovation in Poland (FinTech) in 2017, as well as the Innovation Hub Programme and the more recent announcement of the KNF Regulatory Sandbox. The Sandbox will run under a decentralised model by a group of industry stakeholders to be known as "Sandbox Operators."The Sandbox is open to firms planning to start operations within the financial market and that have developed an untested new financial product/service based on innovative technologies. It is also open to entities that already offer innovative products on the financial market and would like to conduct further testing on potential new services.

PEOPLE ON THE MOVE

Has there been movement in your department? Let CBPN know and we'll include the news in our next issue.

Octavian Armașu became Governor of the National Bank of Moldova on 30 November. Armașu was finance minister before being appointed to head the central bank for a seven-year term.

Paul Beaudry was named Deputy Governor of the Bank of Canada on 4 December. Mr. Beaudry is currently a professor of economics at University of British Columbia's Vancouver School of Economics, and will join the Bank of Canada on 18 February 2019.

Roberto Campos Neto will take over as Governor of the Central Bank of Brazil, once confirmed by the Senate in coming months. Neto is currently a senior executive with Santander Brazil.

One of Mexico's most prominent economists, **Gerardo Esquivel**, has been nominated to be Deputy Governor of Banco de México. Esquivel's wife, **Graciela Marquez**, has been tapped to serve as economy minister in the new Obrador government.

Economist **Alberto Graña** took office as President of the Central Bank of Uruguay on 28 November. Graña succeeds Mario Bergara, who left office in October to be a candidate for Uruguayan presidential elections in 2019. Graña previously served as President of the Central Bank from January 2014 to April 2015.

After seven years in the role, SWIFT CEO **Gottfried Leibbrandt** will step down at the end of June 2019. The news was announced on 12 December. It has been an intense but rewarding seven years," said Leibbrandt. "I am perhaps most proud of gpi; SWIFT and its community managed to radically innovate the very core of correspondent banking, in what has been the biggest innovation in SWIFT's 40 year history."

National Bank of Slovakia (NBS) Governor **Jozef Makúch** resigned from his post on 11 December. While Makúch's original tenure was set to end in January 2021, NBS indicated in late November that the Governor would step down in March 2019. Slovakia's Parliament approved the nomination of Finance Minister **Peter Kazimir** as the next Governor on 6 December.

On 10 December, **Urjit R. Patel** stepped down as Governor of the Reserve Bank of India (RBI), citing "personal reasons." The resignation comes amid rising tensions between RBI and India's Finance Ministry. Dr. Patel served as RBI Governor since September 2016. His three-year term was set to end in September 2019. **Shaktikanta Das**, current member of the Finance Commission, has been appointed as the new RBI Governor.

Randal K. Quarles, currently Governor and Vice Chair of the US Federal Reserve Board, was selected as Chair of the Financial Stability Board (FSB) on 26 November 2018. **Klaas Knot**, currently president of De Nederlandsche Bank, was named Vice Chair for a three-year term, after which he will take over as Chair for three years.

Steven Silberstein was named President and CEO of the Financial Services Information Sharing and Analysis Center (FS-ISAC) on 4 December. Silberstein's appointment begins 1 January 2019, and he succeeds **Bill Nelson** in the role. Nelson is departing to become the first CEO of the Global Resilience Federation (GRF). The GRF is a non-profit world-wide hub for support, analysis, and multi-industry intelligence exchange.

Alberto Graña

Bill Nelson

Gerardo Esquivel

Klaas Knot

Octavian Armașu

Paul Beaudry

Randal K. Quarles

Roberto Campos Neto

Steve Silberstein

Shaktikanta Das

In Conversation with: Lindsay Boulton

Assistant Governor (Business Services), Reserve Bank of Australia

Australia's Near Cashless Journey

This month, CBPN hears from Lindsay Boulton, Assistant Governor (Business Services) at the Reserve Bank of Australia (RBA). He is responsible for the Bank's provision of a range of services to the community, including banking services to the Australian Government and overseas central banks, payment and settlement services to participants in the Australian financial system, and the issue of Australian banknotes. He is also the Reserve Bank's representative on the Australian Payments Council and executive sponsor of the Bank's employee resource group for indigenous inclusion. CBPN asked Mr. Boulton about Australia's recent and upcoming payments initiatives.

CBPN: Governor Lowe delivered a speech at the Payments Summit in Sydney earlier this month entitled "A Journey Towards a Near Cashless Payments System." What, in your view, are the pros and cons of this journey?

LB: The pros of such a journey are that, no matter how the journey unfolds, it will reflect the desires of consumers of payments services and, in that respect, will deliver greater efficiency and economic wellbeing. The cons are that we will be more reliant on electronic systems. As a result, these systems will need to be reliable and cost effective, and will need to be available everywhere that payments are being made. Electronic payments systems will also need to be increasingly secure to avoid payment fraud and hacking. Card-not-present payment fraud has, in particular, been rising in Australia. Several industry initiatives are underway to address the issue. The Australian Payments Council and industry self-regulator, the Australian Payments Network, are working to establish a digital identity framework in Australia. It is intended that the framework can be used by a number of industries not just banking and finance but also insurance, telecommunications, and government where there is a need for individuals and organisations to authenticate their identity.

CBPN: The NPP has been "operational" for the industry since November of 2017, with the public gaining access in February of this year. How has the public rollout gone, in your view?

LB: The rollout has gone well and is gathering momentum. The fact that two of the major banks have been slow to offer the service to their customers has been disappointing but they are now doing so and many smaller institutions have been ready since the start. We are now some 10 months since the platform became available publicly and some 70 institutions offer the basic service. Also, more than 2 million PayIDs – which a short-form address allowing users to make payments without knowing the recipient's account and bank identifier number – have been registered and payments through the platform are now averaging almost 500,000 each day.

The initial offering is a basic 24/7 payment service. Further services are expected to come online over the next eighteen months which will enhance functionality of the platform and, as a result, make it even more attractive.

CBPN: What lessons has the Reserve Bank learned from the NPP stakeholder consultation, design, build, and rollout processes that other countries should take account of?

LB: There are several key factors. The first is ensuring that the design meets the needs of the community, now and well into the future. The payments landscape is changing rapidly, both in terms of the technology underpinning services and in terms of the demands of consumers of payments services. It is relatively easy to see where some of these changes are heading, but less clear for others. It is important, therefore, that payments systems are sufficiently flexible to accommodate whatever products and demands the future brings. The NPP has been designed to allow service providers, whether they are fintechs or traditional players such as banks, to plug their service offering into the core infrastructure of the platform.

The second is that it is important to recognise that there is a significant utility – or network – component to any payments system as well as a commercial component. While service providers should compete to provide consumers with value-for-money products and services, they should collaborate to ensure that the network component of the system is available, accessible, and reliable.

Ensuring that there is a clear distinction between the two is important. NPP was designed with this distinction in mind. As a result, there has been significant industry collaboration in the build and design of the core infrastructure but scope for service providers to overlay the core infrastructure with a competitive product offering.

Third, I think it is extremely important that the design and build phase is managed by an independent project manager with experience in dealing with a range of different organisations. This is important for ensuring that the delivery timetable is met, that reporting on progress is accurate, and that momentum in the build is maintained.

Lindsay Boulton

Assistant Governor (Business Services), Reserve Bank of Australia

Finally, it would be nice in rolling out any new payments system if every service provider was ready to go from day one. However, it does not help consumers if the build and delivery occurs at the pace of the slowest mover. The rollout could take a long time if you wait for everyone to be ready at once. It is important, therefore, to identify the critical mass of service providers needed for day one and move ahead with the rollout on that basis.

CBPN: A number of central banks globally have been investigating central bank digital currencies (CBDC). If Australia is on a "near cashless" journey, what does this mean for your future CBDC explorations?

LB: The Reserve Bank does not see a business or public policy case for a central bank-issued digital currency in Australia at this stage. This doesn't mean that a case may not exist in the future but it is difficult for us to see what advantage a digital currency issued by the Reserve Bank would offer that account to account transfers through the banking system do not, particularly with the emergence of the New Payments Platform. One of the key features of the new platform is that interbank obligations are settled in real time on a line-by-line basis. In other words, the associated interbank obligations are not aggregated and settled later in a batch but settled as each transaction through the system occurs. This gives the platform the same properties as a central bank-issued digital currency so, with NPP in place, there is no obvious benefit in us issuing a digital currency.

Of course, one of the arguments often put forward for issuing a digital currency is that it would allow transactions to be undertaken anonymously, in much the same way that transactions using physical banknotes don't leave an electronic trail. While it is certainly true that a digital currency would allow transactions to be undertaken anonymously, it is not a good public policy argument for the central bank to issue a digital currency.

That said, we are closely watching developments in other countries.

> *"We are looking at new products and payment techniques offered by a variety of providers, including fintechs, as a way of improving the services we provide."*

CBPN: How has the Reserve Bank engaged with fintechs on payments and other financial topics in Australia?

LB: The Reserve Bank has been engaging a number of fintechs on payments-related matters. We are also developing an innovation lab. These measures are less about understanding the underlying technology and more about understanding the potential impacts on financial stability and the operation of policy generally. In this respect, we are also talking with other central banks and observing developments in other countries.

We are also engaging with fintechs to potentially enhance the business services which we, as a central bank, provide. For example, the Reserve Bank provides banking services to the Australian Government and its agencies. We do this in competition with commercial banks under government competition policy. Obviously, we are looking at new products and payment techniques offered by a variety of providers, including fintechs, as a way of improving the services we provide and making them more efficient and cost effective for government customers.

CBPN: It has been a few years since the Reserve Bank of Australia's Review of Card Payments Regulation. Is the Reserve Bank pleased with outcomes so far? How are results monitored?

LB: The more appropriate question, of course, is whether the regulation is achieving its objectives. This question is better answered by my colleagues responsible for payments policy. It is early days but, from my point of view, as a service provider, the answer is yes.

CBPN: What is the status of open banking in Australia? Is the industry ready for the 2019 requirements? What are the key Reserve Bank activities in support of the transition?

LB: The process of implementing the recommendations of a Review into the framework for open banking in Australia is moving along. The implementation is to be phased in over a couple of years, with the major banks making information available on debit and credit card, deposit, and transaction accounts from 1 July 2019, on mortgages by early 2020, and on other products by mid-2020. The timelines for all other financial institutions is a twelve-month delay on the time line for the major banks.

A key underlying element is legislation covering consumers' data rights. The legislation has been drafted and a process of public consultation on the draft framework for consumers' rights concluded at the beginning of October.

The Reserve Bank as a regulator of the payments system is not directly involved in overseeing the implementation of open banking – that responsibility is largely falling to the Australian Competition and Consumer Commission and the Office of the Australian Information Commissioner. That said, the Reserve Bank is a banking service provider – we provide banking services to various government agencies and, under government policy, the services are provided in competition with commercial banks. As a result, we will be making customer information available at our customers' request.

Recent Evolution in the Portuguese Payments Landscape

By Rui Pimentel, Head of Unit, Payment Systems Department, Banco de Portugal

The retail payment services landscape in Portugal has seen a number of developments take form in the course of 2018 as a result of several initiatives where Banco de Portugal has been significantly involved. In most cases, the Bank has driven the national efforts to transform and adapt the payments landscape to new realities.

As happened across the European Union, the new regulatory framework brought by the revised Payment Services Directive (PSD2) has had a clear influence in this process of evolution, now with more visibility with its national transposition process concluded on 12 November 2018. This was an important step for the market, now with clearer rules and openness to the provision of new Account Information and Payment Initiation Services (AIS and PIS) as defined by the PSD2. For 2019, it is expected that the market will finalize its ongoing adaptations in order to comply with the Regulatory Technical Standards (RTS) and Guidelines produced by the European Banking Authority in this context, namely the RTS on Strong Customer Authentication and Common Secure Communication.

However, other developments in the retail payments domain deserve to be highlighted for contributing to an overall situation that differs in substance from just a few months ago. The evolution started with the establishment of a new mandate for our national Payment Systems Forum. A new composition and a set of new activities were launched last May with the 1st Conference organised in its context – an international event hosted by Banco de Portugal to discuss new issues to be dealt with by the Forum. The conference presentations focused on the suggestive theme, "A new era in payments?".

The Forum represents the main platform for dialogue on payments-related issues at the national level, bringing together a broad range of players in the supply and demand sides of the market. The central bank acts as catalyst and fosters cooperation and work towards common objectives by chairing the Forum.

Following a few years of focused work on implementing the Single Euro Payments Area (SEPA), which was the previous big challenge of the Forum, there are currently new dynamics now deserving the attention of the group in the field of security and also in the technology-driven supply of new services and options for end-users to promote growth in electronic payments. The Forum shall work on these dossiers and take advantage of the diversity of institutions represented, while at the same time following developments at the European level, namely as a result of the work of the Euro Retail Payments Board (ERPB). It is expected that the results of the Forum's fresh start and renewed focus will provide a good balance between international trends and innovations in the national market.

Moreover, a national solution for instant payments was launched in mid-September, in compliance with pan-European rules and based on the SEPA Instant Credit Transfer (SCTinst) scheme, as defined by the European Payments Council. This means that the Portuguese payments system is now equipped with a new solution for the execution of instant transactions. The community can now take advantage of a new payments instrument able to perform either P2P or P2B or even B2B payments, with end-to-end processing within a 10-second timeframe and availability 24/7/365, currently with a ceiling of 15,000 euros per transaction.

Although Portugal's new instant payments solution is optional and not yet with full coverage of the local providers, it is anticipated that this will become a popular option for retail payments in the medium term. It should be noted that the set up and operational launch of this product benefitted from the experience and involvement of interbank working groups in the context of CISP, the national Payment Systems Interbank Commission chaired by Banco de Portugal. Though still in its infancy, with just over two months of operation, and not yet with full coverage of reachable current accounts, the take-up of instant payments has proved very satisfactory and the first official statistics are soon to be disclosed.

"Work at Banco de Portugal is being developed on several fronts as a way to ensure not only compliance with international standards and requirements, but also to keep pace with innovative initiatives and the emergence of nontraditional players."

Against this background, the national interbank clearing system (SICOI) underwent a substantial adjustment. The scope of the system was broadened with the incorporation of the new subsystem for instant transfers, the first with real-time settlement, while also adopting a few other changes in the areas of governance, risk mitigation and clarity of rules for participants. These changes additionally enabled better alignment with requirements resulting from the application of the Principles for Financial Market Infrastructures. SICOI now encompasses rules for processing of transactions under six subsystems, covering all cashless retail payment instruments used in Portugal. This includes the payment instruments aligned with the SEPA business rules, reaching this point with a more robust structure and broader coverage.

At the same time, also paying attention to the growing involvement of FinTech companies in the payments domain, and as CBPN took notice in its first issue (Sept 2018), Banco de Portugal has been an active player in the setting up of Portugal FinLab, an initiative completed in September involving all national regulatory entities for the financial sector. The FinLab was established together with Portugal FinTech to enable dialogue under a common platform for issues of common interest, as well as the presentation of projects by new entrants and/or incumbents in the market.

In a nutshell, work at Banco de Portugal is being developed on several fronts as a way to ensure not only compliance with international standards and requirements, but also to keep pace with innovative initiatives and the emergence of non-traditional players. The Bank is also focused on setting up the right cooperation model and enabling inclusive platforms to allow input from a number of entities. We believe this approach provides better guarantees of readiness to adjust and ensure the right evolution of the Portuguese market, in the context of its own features as well as being part of the wider European market. The approach also strengthens the Bank's ability to participate in and contribute to international projects, enhancing its dual role as regulator and policymaker.

CoDi: An Evolution of Mexico's Main Payment System

By Miguel Díaz Díaz,
Director of Payment Systems, Banco de México

BANCO DE MÉXICO

One of the three objectives of Banco de México, as established by its law, is to foster the proper functioning of payment systems. We have worked towards accomplishing this mandate through the operation of Mexico's most relevant payment system, SPEI, and through oversight and regulation of other financial market infrastructures.

We have the premise that, as a trusted central node in the financial network, it is our responsibility to provide robust infrastructure, capable of accommodating different types of payment services provided by different financial institutions in a secure and efficient way. Furthermore, Banco de México has a direct commitment with the population; since its origins in 2004, SPEI has provided final users with access to Central Bank instant settlement and fast crediting of funds by participating financial institutions. In this line, we upgraded the system in 2016 to provide 24/7 operation and a more robust architecture capable of higher service levels, consistent with people's expectations.

The next challenge on our quest to provide the final user with better services is a standardized request to pay (RTP) functionality on SPEI on a 24/7 basis, which we have called CoDi (digital collection or *cobro digital* in Spanish). On one hand, CoDi will allow people to initiate RTPs from any cell phone with an appropriate app, which could be developed by the Central Bank, a financial institution or another firm (we are expecting apps of the three flavours). On the other hand, this project will allow account holders to respond to these in a simple, secure, homogeneous, and efficient way. By providing the RTP functionality on SPEI we will provide the infrastructure needed to fulfill some of the rapidly evolving needs of final users for retail payments.

SPEI has been a "fast payment system" for some time now; its use by the population for small value payments has been growing significantly for the past five years. Most account holders are now familiar with and demand the instantaneous feature when making payments. However, the system is not widely used for real time retail payments, possibly because of the inconvenience, inefficiency, and time required to input the necessary information to complete a transfer. Other existing payment rails have characteristics that have thwarted the adoption of electronic payment means in the country: high costs to businesses have reduced the penetration of point of sale terminals; high levels of fraud and chargeback have been a serious issue for customers, financial institutions, and merchants; and the lack of control on direct debits has put off account holders from using this functionality. The introduction of an RTP layer to SPEI reduces the problems described above. It solves the inefficiency of inputting the user's information, reduces the costs to merchants of receiving payments because SPEI is an inexpensive alternative, reduces the probability of fraud by making the payer authenticate with the financial institution, and gives control of the account back to the owner because she expressly authorizes every transaction.

Financial inclusion and higher adoption of electronic payment systems are two of the main expected results of the new functionality. The account holder network generated by SPEI creates large positive externalities as it is, because all banks and several other financial institutions in Mexico are direct participants in the system and have the obligation to provide the service to their customers. Nevertheless, by leveraging the relatively wide existing smartphone network and simplified account opening schemes, CoDi could significantly increase the network externalities and allow for a new rail for instant retail payment systems. This can include financially excluded segments of the population and increase the use of electronic payments by already included segments. With this, we continue pursuing our mandate of ensuring that secure and efficient payment systems are available and reduce the use of cash.

For Banco de México, the network externalities generated through its systems and infrastructures should be available to any regulated entity, big or small, that has the resources and ability to comply with requirements designed to protect the network. Thus, new financial institutions could enter the market to provide innovative solutions based on the infrastructure provided by the Central Bank.

CoDi was designed to simplify and homogenize the experience of requesting a payment or answering a request to pay for the final users as much as possible, while at the same time maximizing the safety and integrity of the system. This design is consistent with the view that payments should be transparent to users, and that payments are a commodity, on top of which different value added services can be provided. The idea is that people using the functionality will face a simple experience, and this is achieved by solving any complications in the back office among the operator of the system and its participants. CoDi is not specifically designed as a scheme for person-to-person, person-to-business, or business-to-business payments; it can serve all these purposes and it is up to participants to develop products that will benefit different types of users.

The processing of a transaction is very simple. From the RTP generator side (e.g. a merchant), using CoDi implies downloading an app created by the Central Bank, a financial institution or a certified third party provider. For onboarding, the only mandatory information input is the account number of the requester to whom resources will be credited; based on this, the system runs a process with the financial entity that manages the account, through which the name of the recipient, exactly as it appears on its client's records, is embedded in the app and registered centrally in the system in a such a way that if this information is modified it invalidates the RTPs created with it. This onboarding process takes about one minute and helps mitigate the impersonation risk in which a would-be fraudster tries to use a name that is different from the one registered to the account number within the financial institution. After this simple and fast onboarding process the requester is ready to generate RTPs.

Once the RTP message is generated, CoDi allows for three ways of transferring it to the buyer, namely, QR codes, NFC and through the internet. These information transfer schemes allow the system to operate face-to-face RTPs for brick and mortar transactions, distant e-commerce RTPs, and recurrent RTP for services such as utilities or monthly subscriptions.

Institutions participating in SPEI will have an obligation to receive and process CoDi's RTPs on the apps they provide to their customers. Once a message is received, their apps should open on the last step of the sending process of a traditional SPEI transfer order in which all the information of the recipient account has been pre-populated and only the final validation by the buyer is required, for example using a fingerprint, a photo of the iris, a simple password, or any other authentication method the institution chooses. This validation process is not homogenized as it is each institution's responsibility to decide on its desired security level. Whichever validation method is used must not be disproportionately complex compared to other services provided by the institution, considering that the financial institution will have already validated the device used.

With respect to the buyer, she has to download her bank's app and follow through the bank's onboarding process, through which the customer is centrally registered. Once on board, the buyer receives the RTP through any of the channels mentioned before (NFC, QR or internet).

The financial institution's app opens as described above and the buyer inputs the requested authentication information. After this, the financial institution prepares a traditional SPEI payment instruction with the appropriate flags and the payment flows through the existing SPEI protocol. The transaction is settled in real time and is credited to the recipient's account in a few seconds. Then the recipient's financial institution issues a fast notification to CoDi, which in turn sends a notification to the merchant and the buyer certifying that the transaction has been successful. This process should not take longer than a few seconds so that it could be considered as a suitable substitute for cash.

From a business perspective the idea is to promote that the service is provided in the best conditions to customers so that it may compete with cash, even for small value transactions and particularly for users that have been excluded from the use of electronic payments in the past. Currently there is a prohibition on charging recipients of electronic fund transfers, and also on charging *ad valorem* on the transfer amount; these restrictions will remain in place, except for small value transactions on which a flexibilization on the ad valorem restriction is being considered. As operator of the system, Banco de México will not charge participants for the number of transactions processed through the CoDi scheme to ensure that the costs for participants are not generating incentives to constrain the use of the scheme.

The mere existence of CoDi introduces pressure to incumbent retail payment systems and pushes the payments ecosystem in Mexico forward. Through this, Banco de México continues to foster financial inclusion and reduce inefficient uses of cash, ultimately pushing towards its mandate of fostering the proper functioning of payment systems.

Argentina: The Latest Innovations in Retail Payments

By Julio C. Pando, Means of Payment Deputy General Manager, Banco Central de la República Argentina

The guiding objectives of Banco Central de la República Argentina (BCRA) are based on three fundamental pillars, including one uniquely dedicated to promoting payments modernisation. The key focus of this pillar is on diversifying electronic payment methods in Argentina with the objective to offer consumers new options that are safe, agile and efficient. At the same time, the pillar seeks to favor mechanisms that promote competition and facilitate the inclusion of new participants in the payment system. This strategy is aligned with best practices and advances at the international level, but strategically tailored to local needs.

Among the latest retail payment innovations promoted by BCRA are the electronic cheque (E-Cheq), QR code standardisation for mobile payments, and the extension of the routing system for bank accounts to payment service providers (PSPs).

There are a number of diverse factors involved in BCRA's payments modernisation journey. The use of electronic transfers has increased significantly and, in addition, non-bank payment service providers (PSPs) have increased in terms of their overall numbers and rate of market participation. All of these elements have combined to trigger the aforementioned innovations, developed to optimise the payments chain and provide consumers with faster and more efficient payment instruments and operations.

ELECTRONIC CHEQUE - E-CHEQ

Argentina has offered electronic instant funds transfers since 2011, with more than 125 million transactions taking place annually. However, as the cheque remains in common use by many businesses throughout the country, mainly as a finance instrument, it makes sense to revitalise it as a means of payment. BCRA's recently issued Communication A6578 on the E-Cheq is part of this revitalisation, stating that the E-Cheq may be a common or deferred payment and will have the character of an enforceable and endorsable title, without restrictions on the amount of endorsements established in the current regulations for physical cheques. It is expected that the E-Cheq will facilitate the transaction of approximately 85 million cheques annually, and will reduce operational costs related to the transfer and verification of documents.

As per BCRA regulations, as of next year financial institutions in Argentina will be obliged to receive E-Cheq deposits. This means that entities that have opted out of issuing E-Cheqs must still be prepared to receive them for deposit or payment, as well as subsequent accreditation and collection.

STANDARDISATION OF THE QR CODE FOR PAYMENTS

In January 2018, BCRA issued Communication A6425 on QR codes (Quick Response Codes) for payments. In this communication, BCRA mandated the adoption of an international standard – EMVCo® QR Code Specification – to facilitate interoperability and competition between different digital wallets and payments platforms. It is anticipated that the country will have about 300,000 points of sale equipped to accept the standardised QR code payments by the end of 2018.

UNIFORM VIRTUAL KEY (CLAVE VIRTUAL UNIFORME - CVU)

As standardisation is necessary to create open access to markets for service payment providers, BCRA focused on developing the means to identify non-bank transactional accounts in the same way bank accounts are standardised through a Uniform Banking Code (Clave Bancaria Uniforme – CBU). In May of this year, BCRA decided to extend the bank account routing system to PSPs through the creation of the Uniform Virtual Key (Clave Virtual Uniforme – CVU). The CVU is a subtype of the CBU, that is, the uniform bank account routing address.

The CVU initiative – detailed in Communication A6510 – aims to strengthen the interoperability of PSPs such as mobile wallets or prepaid cards with the country's existing banking system, while also seeking to increase the traceability of operations. The CVU is associated with the PSP's wholesale account but contains information about the beneficiary of the operation, which allows for real-time transfers between both players using the existing infrastructure, thus minimising the need for additional investment.

Furthermore, the expansion of the account routing system strengthens the use of the Alias CBU created in 2016, which was designed to facilitate the use of Electronic Fund Transfers (see Communications A6044 and A6109). This alias masks the 22 digits of the CBU behind an alphanumeric sequence (such as ArgentinaTrip) and is much easier to remember and send in writing or verbally.

MOVING FORWARD

Going forward, BCRA will increasingly turn its sights to the fintech phenomenon, which poses the challenge of defining a favorable scenario that combines security, competition and efficiency with innovation. Over the coming year, BCRA will be focused on increasing adoption and use of electronic means of payment through competition and innovation.

Going Cashless: What Are the Barriers?

By Stephen Bedggood, Head of Product Management, Bluechain Payments Ltd

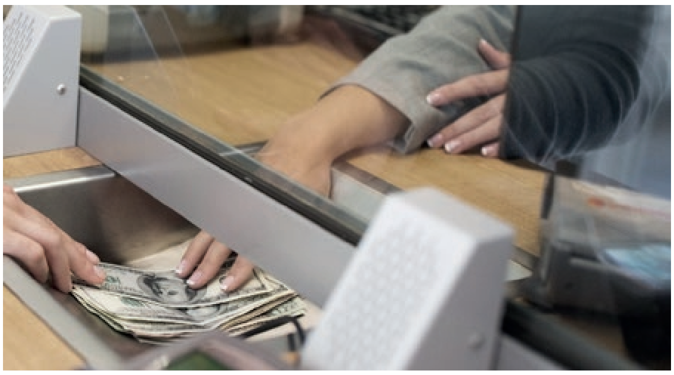
bluechain

The race to cashlessness is being run around the globe, but at very different speeds. In Canada, the Bank of Canada reports just 10 percent of retail payments were made in cash in 2017. But in the UK, according to the British Retail Consortium, cash payments still account for over 40 percent of retail transactions. And in the developing world, cash payments commonly still account for over 90 percent of the economy.

Much has been written about the advantages of the cashless society, but the barriers to going cashless are many and varied, and the importance of each can change with geography and demography. In the developed world, there is a certain inevitability about going cashless or, at least, cash-lite. In these economies, the barriers mainly concern convenience, privacy, and trust. But in the developing world, where cash continues to dominate both the formal and informal economies, going cashless is mostly a matter of cost and financial exclusion.

ACCESS TO TECHNOLOGY

There are numerous digital payment technologies, but they all rely on at least one party having access to the Internet or mobile network. Internet use in the developed world is typically above 85 percent, whereas in the developing world, especially Africa, where access is predominantly via smartphones, it is rare to find internet use rising above 35 percent of the population. Although digital payment apps are available on all mainstream mobile phones, many are restricted to a specific OS or hardware vendor, such as Apple Pay on iOS and Google Pay on Android. To have the maximum effect on digitizing cash, payment apps need to be OS and hardware agnostic.



> *"Without interoperability between mobile money accounts and traditional bank accounts, the impact on the use of cash is limited."*

COST OF PAYMENTS

The technical and regulatory infrastructure upon which banks operate is decades old and fraught with unnecessary compliance costs and burgeoning rates of card fraud. The banks' high fraud and operating costs are further compounded by the cost of point-of-sale (POS) terminals, which are needed to interface between the card schemes and the consumer's debit or credit card or mobile e-wallet.

These costs are mostly recouped through merchant fees and transaction fees, which are either borne by the merchant (reducing their margins) or passed on to the consumer as surcharges or increased prices. The cost of payments, especially on smaller merchants, can be prohibitive, making cash a more attractive option. POS hardware, in particular, is expensive to install and maintain, putting credit and debit card payments out of the reach of most small and micro traders.

Mobile money services offered by telcos provide an alternative to conventional banking in the developing world, but their uptake is impeded by cost and poor interoperability with the banking system. According to GSMA, an industry body representing over 800 mobile network operators (MNOs), the vast majority of mobile money transactions are cash-in-cash-out via agents. Hence, although the peer-to-peer transaction is digitized, the impact on cash reduction is relatively small.

ACCESS TO FINANCIAL SERVICES

Another basic requirement is having access to financial services, in particular, a bank account linked to a mobile payment app. According to the World Bank, the vast majority (91 percent) of adults in OECD high-income countries had an active bank or mobile money account in 2017, while only 44 percent of those in developing countries did.

The percentages without debit or credit cards are even higher, which is significant when considering the types of digital payment technology being promoted. Most e-wallets, including Apple Pay and Samsung Pay, require the user to have access to a recognized card account, such as a Visa or Mastercard debit card or credit card. In Indonesia, for example, that excludes 90 percent of the population.

Traditionally, banks haven't prioritized the unbanked, viewing them as having limited commercial potential and expensive to serve. MNOs (telcos) have taken up the slack, offering mobile money services to their unbanked users. But without interoperability between mobile money accounts and traditional bank accounts, the impact on the use of cash is limited.

According to the World Bank, 230 million financially excluded people still receive their wages in cash, and 235 million unbanked adults in developing countries receive cash for their agricultural products. For as long as a business purchases goods from unbanked suppliers or pays wages to unbanked employees, digitizing the business is not feasible.

The elderly, women, farmers, small traders, and the poor are often identified as disadvantaged classes for accessibility of online services and digital payments. In particular, people who are older, less affluent or with lower education levels continue to have a distant relationship with digital technology.

> *"Most e-wallets...require the user to have access to a recognized card account, such as a Visa or Mastercard debit card or credit card. In Indonesia, for example, that excludes 90 percent of the population."*

> *"The key to reducing the use of cash in the developing world is to reduce the cost of digital payments, making it accessible to a broader spectrum of the population."*

REMOVING THE BARRIERS

The key to reducing the use of cash in the developing world is to reduce the cost of digital payments, making it accessible to a broader spectrum of the population. Fraud is the single largest contributor to the cost of payments, so the first issue that needs to be addressed is fraud in all its forms. And to get rid of fraud, the payment technology must employ smart two-way communications between the payee and the payer. That rules out any form of "dumb" payment, such as card not present (CNP) or QR codes, which create a myriad of opportunities for fraudsters to exploit.

Unfortunately, the financial industry's attempts at solving payment fraud have been disjointed and, judging by the latest fraud figures, largely ineffective. Each payment app and financial institution employs its own security method, each with its own user name, password, PIN, security questions, dongle or passcode app. The diversity and complexity of these security measures discourages users, especially users who are older or with lower education levels. Ideally, users want one interoperable app, with one security process, to handle every type of payment, whether shopping in-store or online, paying bills, or sending money to friends and family.

Mobile phone networks provide the only viable infrastructure for digital payments. But to ensure that the technology is available to all users, the mobile payment technology must be device agnostic, working equally well with Android and iOS devices. Utilizing existing mobile phone devices and infrastructure has the added cost advantage of removing the need for dedicated POS terminals. This lowers the cost of acquiring merchants, ensuring that even micro traders in Africa and Asia can afford to participate in the digital payments revolution.

ABOUT THE AUTHOR

Stephen Bedggood, Head of Product Management, Bluechain Payments Ltd

Stephen Bedggood has been responsible for defining commercial strategies and consumer propositions to drive the convergence across banking and mobile for 14 years. Stephen is currently Head of Product Management at Bluechain, one of the new breed of fintechs making waves in the digital payments ecosystem.

Payments in the Platform Economy: The 2018 Australian Payment Summit

On 26-27 November 2018, more than 250 delegates, including 50 local and international speakers, came together in Sydney for the Australian payments industry's flagship annual event – the Australian Payment Summit (APS).

Convened by Currency Research (CR) in collaboration with the Australian Payments Network (AusPayNet), the summit was a rare opportunity to discuss the region's latest payments developments and trends with experts, regulators, and innovators. CR's VP of Payments Gonzalo Santamaria welcomed delegates, followed by AusPayNet CEO Leila Fourie who set the scene by elaborating on the APS 2018 theme of "Payments in the Platform Economy."

SHIFT TO THE DIGITAL ECONOMY

Reserve Bank of Australia (RBA) Governor Philip Lowe delivered the opening keynote address, A Journey Towards a Near Cashless Payments System. The address covered issues such as the rapid shift to electronic payments, ensuring the functionality, safety, and reliability of electronic payment systems, the cost of operating these systems, and the importance of strong competition.

Per capita Australians make, on average, nearly 500 electronic payments a year, whereas ATM visits have dropped to an average of 25 times annually. Governor Lowe remarked that it was now easier than ever to envisage a world where "cash becomes a niche payments instrument."

The Governor emphasised that RBA does not yet foresee a world without banknotes, but said that the launch of the New Payments Platform is a "big step forward for the industry." He anticipates that Australia's shift to electronic payments will continue. Throughout the transition, RBA's Payment Systems Board will keep a close eye on the issues impacting the nation's payments system.

Governor Philip Lowe, RBA

PLATFORMIFICATION

The Summit heard compelling evidence of a shift away from individual financial services products towards the 'platformification' of financial services as part of a broader customer lifestyle experience.

A panel session on payments in the platform economy uncovered how tech giants in Asia such as **Tencent** (WeChat Pay) and **Alibaba** (Alipay) are morphing into lifestyle companies, offering services including travel, telecommunications, and online shopping alongside payments. A panelist in the Neo Banks as the Next Generation of Digital Banks session summarised their bank's new approach by saying they've "crossed out banking and replaced it with living."

OPEN BANKING

AusPayNet CEO Leila Fourie moderated panelists from the **European Banking Federation** (EBF), **Payments NZ**, **ACI Worldwide**, and **King & Wood Mallesons** in a session that explored new opportunities in open banking. Panelists discussed the many drivers for implementing open banking reforms. Among these reforms was **The Treasury of the Australian Government's** May 2018 announcement of legislation to create a consumer data right in financial services.

Gijs Boudewijn, Chair of the EBF's **Payments System Committee**, said there was a need for a stronger and more prescriptive government mandate – along with implementation support – to help Europe's open banking journey. Against this, Payment NZ's Steve Wiggins said New Zealand was moving towards open banking purely through industry collaboration. The panelists also discussed open banking's potential to drive greater financial inclusion, as well as supporting competition and economic growth.

BUILDING TRUST

The common theme of 'trust' emerged over the two days. Governor Lowe acknowledged the important work underway to build customer trust in the digital environment. He referred to work led by AusPayNet to develop a framework to mitigate online fraud, as well as a standards-based trust framework for digital identity being led by the **Australian Payments Council**.

A session on the search for new business models in payments also circled around trust (or lack thereof) and the role it plays in determining the success of major tech giants in the payments space. Potential 'seeds of failure' include consumer and client concerns about data privacy and the costs of vetting inappropriate content.

REGULATING INNOVATION

On day two, Melisande Waterford from the **Australian Prudential Regulation Authority** (APRA), Tony Richards from RBA, and Stephen King from the **Productivity Commission** took the regulators' perspective with a discussion on reforms disrupting the regulatory landscape that are driving competition and innovation. Mr. Richards provided a "quick tour" of some of the issues on RBA's radar in its role as the primary regulator of the nation's payments system.

'DRIVING' THE FUTURE OF PAYMENTS

AusPayNet Chair Rob Craig closed the event by pointing to the evolution of motor cars as a good analogy for what's happening in payments. Fifty years ago, a motor car was difficult to drive, but the car itself was simple. The modern motor car is far easier to drive, although it is far more complicated under the bonnet.

We're witnessing new types of interactions between producers and consumers that are much more complex, using the latest technologies, algorithms, data management, and more. Platforms are becoming the key aggregators in this new transaction space - a major macroeconomic shift with a future that remains unwritten.

David Birch, Director, Consult Hyperion

REPORTS IN REVIEW

FINTECH

In late November, two noteworthy reports on fintech emerged from central banks in New Zealand and Belgium respectively. Appearing in the **Reserve Bank of New Zealand**'s (RBNZ) Bulletin, FinTech Developments in Banking, Insurance and FMIs examines several key technological developments in the fintech space, their impact on financial services, and the implications for RBNZ in its role as regulator and guarantor of market integrity. Drawing on existing and potential applications of fintech, both domestically and internationally, the report concludes that while fintech developments do have the potential to enhance efficiencies, there are also inherent risks to the stability of the financial sector, requiring sustained vigilance from regulatory authorities.

In a similar vein is the Impact of Fintech and Digitalisation on the Belgian Banking Sector and its Supervision report, published 22 November by the **National Bank of Belgium** (NBB). The report summarizes the results of a survey conducted recently by NBB and provides insights into the current state of fintech within Belgian banking, the preparedness of the country's financial institutions vis-à-vis fintech products and solutions, and highlights identified best practices for assessing the fintech strategy of Belgian banks.

CYBER SECURITY

The issue of cyber security continues to be top of mind for many in the payments industry, as demonstrated by the publication in recent weeks of no less than six significant reports on the subject. In the United Kingdom, the **Financial Conduct Authority** (FCA) on 28 November published Cyber and Technology Resilience: Themes from Cross-Sector Survey 2017-18. Based on survey results from nearly 300 participating firms across the financial sector, the report analyzes how each entity self-assesses its own cyber capabilities and highlights the current strengths and shortcomings of the industry as a whole. Key takeaways include the firms' belief that they have strong governance controls in place; cyber resilience as a top priority for a majority of respondents; and an expressed need for improved information sharing.

Elsewhere, the **European Payments Council** (EPC) on 29 November issued its 2018 Payment Threats and Fraud Trends Report, its second annual overview of the most pressing security issues affecting the payments ecosystem. In addition to a description and definition of each threat, the report suggests ways in which current and future security risks can be mitigated.

Authored jointly by **SWIFT** and **BAE Systems**, The Evolving Advanced Cyber Threat to Financial Markets, published 19 November, examines the central cyber threats currently impacting global financial markets. Identifying the securities market as one of the more susceptible and at-risk financial sectors, the report also points out that banking and payments participants must "continue to strengthen security controls while building in protection for upstream systems."

Also from 19 November comes Outsourcing – Findings and Issues for Discussions from the **Central Bank of Ireland**. While the report deals with a host of issues related to outsourcing, most germane here are those sections dealing with fintech developments and the implications for cyber security and resilience. As the report asserts, because regulated firms will continue to partner heavily with fintechs in the coming years, the appropriate degree of oversight in these partnerships must be determined and ensured.

The Federal Reserve Bank of Cleveland, in its role as head of the Cybersecurity Analytics Support Team (CAST), released on 26 November a new multimedia piece, The Threats, the Criminals, the Motives – Cybersecurity at the Fed, exploring how CAST works to identify and mitigate cyber security risks for banks across the Federal Reserve System. The work features interviews with CAST members, who provide tips to institutions and individuals for warding off cyber threats.

Most recently, on 4 December the **Basel Committee on Banking Supervision** published Cyber-resilience: Range of Practices. Based on an analysis of previous surveys and feedback from international experts and industry participants, the report "identifies, describes, and compares the range of observed bank, regulatory, and supervisory cyber resilience practices across jurisdictions." The current challenges and initiatives to boost cyber resilience are summarised in 10 key findings and illustrated by case studies.

FINANCIAL INCLUSION

Also recently published is Global Microscope 2018: The Enabling Environment for Financial Inclusion, the **Economist Intelligence Unit**'s annual review of financial inclusion policy in 55 developing countries. Of the countries included in the report, Colombia was found to have the most favorable conditions for promoting financial inclusion, followed closely by Peru, Uruguay, India, and the Philippines. Top-rated countries exhibited high levels of government coordination and policy support for financial inclusion, with India the only country in the top five yet to issue a formal financial inclusion strategy. Other notable takeaways include the market penetration of e-money in several countries, a lack of connective infrastructure that has hindered financial inclusion in sub-Saharan Africa and MENA, and the need in many countries to enhance cybersecurity protections and secure data privacy.

TALKING POINTS

No time to dig? CBPN rounds up the most relevant speeches on central bank payments issues so you don't have to.

NOVEMBER 2018

Banca d'Italia
Governor's Welcoming Remarks at the TIPS Launch Event. Delivered by Governor Ignazio Visco on 30 November.

Bank for International Settlements
On Money, Debt, Trust and Central Banking. Delivered by Head of Monetary and Economic Department Claudio Borio on 15 November.

Bank of England
Transforming Our Payments Infrastructure. Delivered by Executive Director for Banking, Payments and Financial Resilience Victoria Cleland on 27 November.

Bank of Ghana
Launch of Mobile Money Interoperability Phase II. Delivered by Governor Dr. Ernest Y. Addison on 28 November.

Central Bank of Kuwait
Steering FinTech for a Prosperous Society Delivered by Governor H.E. Dr. Mohammad Y. Al-Hashel on 27 November.

De Nederlandsche Bank
A New Banking World on the Horizon. Delivered by Executive Director of Supervision Frank Elderson on 30 November.

Deutsche Bundesbank
The Role of the Renminbi in International Payments. Delivered by Member of the Executive Board Burkhard Balz on 14 November.

European Central Bank
TIPS and the Future of Innovative Retail Payment Solutions in Europe. Delivered by Member of the Executive Board Yves Mersch on 30 November.

Federal Reserve Bank of New York
Four Questions on the State of Cyber Resilience and Endpoint Security. Delivered by Executive Vice President Richard Dzina on 26 November.

DECEMBER 2018

Bank for International Settlements
Big Tech in Finance and New Challenges for Public Policy. Delivered by General Manager Agustín Carstens on 4 December.

Bank Negara Malaysia
Reimagining the Regulatory Landscape for Payment Systems. Delivered by Deputy Governor Abdul Rasheed Ghaffour on 4 December.

Bank of England
Setting Standards. Delivered by Deputy Governor, Markets and Banking Dave Ramsden on 6 December.

Banque de France
Trends in Financial Intermediation and Implications for the Regulation and Supervision of the European Financial Sector. Delivered by First Deputy Governor Denis Beau on 11 December.

European Central Bank
Euro Cyber Resilience Board for Pan-European Financial Infrastructures. Delivered by Member of the Executive Board Benoît Cœuré on 7 December.

European Commission
Protecting Consumers in a Digital World. Delivered by Commissioner Margrethe Vestager on 4 December.

Tell us what you need to know.

Our goal is to provide central banks and market infrastructure with a compelling monthly look at the state of the industry. We invite CBPN readers to send their career news, story ideas, and thoughts to Senior Editor, **Brianna Erban**.

You can also join the conversation (or start one!) in our Central Bank Payments News **LinkedIn Group**.

Central Bank Payments News™

ABOUT CBPN

Central Bank Payments News (CBPN) is a monthly e-publication dedicated to informing the worldwide central bank payments & market infrastructure community of the most relevant and timely payments issues impacting the central bank today. With a unique and in-depth payments focus tailored to a central bank perspective, CBPN is an independent and comprehensive source of intelligence that helps readers navigate a rapidly changing payments landscape.

CBPN has a global reach, including leaders and experts in the central bank payments & market infrastructure, as well as relevant operators and participants under the oversight of the central bank. CBPN is published by Currency Research, the independent knowledge-based organization and leading global resource for central banks, their suppliers, and the related supply chain for currency and payment systems.

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Senior Editor: Brianna Erban
Contributors: Stephen Beggood, Lindsay Boulton, Miguel Díaz Díaz, Chad Harper, Julio César Pando, Rui Pimentel, Gonzalo Santamaria, Jordan Taylor
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For all inquiries and comments, and to send ideas or submissions: cbpn@currency-research.com

Ewropa Business Center, Level 3, Suite 701, Dum Karm Street, Birkirkara BKR 9034, Malta. https://cbpaymentsnews.com/