

The G20 Research Group
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presents the

2018 G20 Buenos Aires Summit Final Compliance Report

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“The University of Toronto ... produced a detailed analysis to the extent of which each G20 country has met its commitments since the last summit ... I think this is important; we come to these summits, we make these commitments, we say we are going to do these things and it is important that there is an organisation that checks up on who has done what.”

— *David Cameron, Prime Minister, United Kingdom, at the 2012 Los Cabos Summit*

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15. Financial Regulation: Technology

“We will step up efforts to ensure that the potential benefits of technology in the financial sector can be realized while risks are mitigated.”

Buenos Aires Leaders’ Declaration

Assessment

Country	No Compliance	Partial Compliance	Full Complianceas
Argentina		0	
Australia		0	
Brazil		0	
Canada		0	
China		0	
France		0	
Germany		0	
India	-1		
Indonesia		0	
Italy		0	
Japan			+1
Korea		0	
Mexico	-1		
Russia		0	
Saudi Arabia		0	
South Africa		0	
Turkey		0	
United Kingdom			+1
United States		0	
European Union			+1
Average Score		+0.05	

Background

Technological innovation in the financial sector is developing rapidly. In this regard, the German G20 Presidency, in line with its overall focus on digitalization, asked the Financial Stability Board (FSB) to identify supervisory and regulatory issues of new technologies in the financial sector that merit authorities’ attention from a financial stability perspective. The FSB pointed to several priority areas where international institutions and national authorities should take into account FinTech issues when developing regulatory frameworks, including managing operational risks from third-party service providers, mitigating cyber risks and monitoring macrofinancial risks.³⁴⁴² At the Hamburg Summit, G20 leaders supported the FSB’s work and asked it to continue its monitoring exercise in the area of FinTech.³⁴⁴³ The FSB took “a two-sided approach, considering the potential of FinTech innovations to support financial stability and to engender new systemic risks.”³⁴⁴⁴ In Buenos Aires, G20 leaders made a commitment fully in line with the FSB’s approach, deciding to step up “efforts

³⁴⁴² Financial Stability Implications from FinTech. Supervisory and Regulatory Issues that Merit Authorities’ Attention, FSB (Basel) 27 June 2017. Access date: 28 May 2019. <http://www.fsb.org/wp-content/uploads/R270617.pdf>

³⁴⁴³ G20 Leaders’ Declaration. Shaping an interconnected world, Hamburg, 7/8 July 2017, CIIR RANEPa (Hamburg) 8 July 2017. Access date: 28 May 2019.

https://www.ranepa.ru/images/media/g20/2017hamburg/G20%20Hamburg%20leaders_%20communiqué.pdf

³⁴⁴⁴ Monitoring of FinTech, FSB (Basel) 2017. Access date: 28 May 2019. <http://www.fsb.org/what-we-do/policy-development/additional-policy-areas/monitoring-of-fintech/>

to ensure that the potential benefits of technology in the financial sector can be realized while risks are mitigated.”³⁴⁴⁵

Commitment Features

This commitment requires G20 members to implement measures aimed at fully realizing the potential benefits of FinTech, while mitigating risks. The FSB identified several issues related to FinTech as building blocks for ensuring a strong, sustainable and resilient financial system. As FSB was entrusted with the task to assess the potential benefits and risks brought by the technologies in the financial sector and its work was fully supported by G20 members, the scoring for this G20 decision is based on the assessment of the work made by the members on priority areas for international cooperation as identified by the FSB. These guidelines are fully based on the areas of cooperation outlined in the FSB’s report “Financial Stability Implications from FinTech Supervisory and Regulatory Issues that Merit Authorities’ Attention” to provide accuracy and full consistency with the FSB’s approach approved by G20 members. According to the FSB, financial authorities should focus on the following action areas:

1. *Managing operational risks from third-party service providers.* Authorities need to establish oversight mechanisms for important third-party service providers to financial institutions, for example, in cloud computing and data services. This may entail increased international coordination between financial authorities and other partners, such as authorities responsible for information technology security.³⁴⁴⁶
2. *Mitigating cyber risks.* Authorities need to lower the probability of cyber events that have adverse effects on financial stability, including through designing contingency plans for cyberattacks, information sharing, monitoring, and strengthening financial and technology literacy.³⁴⁴⁷
3. *Monitoring macrofinancial risks.* Authorities should develop capacities to access existing and new sources of information concerning macrofinancial risks related to FinTech, such as those resulting from the activities of systemically important institutions and unstable financial flows.³⁴⁴⁸
4. *Cross-border legal issues and regulatory arrangements.* Authorities should ensure cross-jurisdictional compatibility of national legal frameworks related to innovative cross-border lending, trading and payment transactions, such as applications of distributed ledger technology (DLT).³⁴⁴⁹
5. *Governance and disclosure frameworks for big data analytics.* Authorities should develop frameworks to assess the robustness of the complex big data analytics models or new unforeseen risks in market behaviour, and to determine whether market participants are fully in control of their systems.³⁴⁵⁰

³⁴⁴⁵ G20 Leaders’ declaration. Building consensus for fair and sustainable development, CIIR RANEPa (Buenos Aires) 3 December 2018. Access date: 28 May 2019.

https://www.ranepa.ru/images/media/g20/2018buenosaires/buenos_aires_leaders_declaration.pdf

³⁴⁴⁶ Financial Stability Implications from FinTech. Supervisory and Regulatory Issues that Merit Authorities’ Attention, Financial Stability Board (Basel) 27 June 2017. Access date: 24 May 2019, p.30. <http://www.fsb.org/wp-content/uploads/R270617.pdf>

³⁴⁴⁷ Financial Stability Implications from FinTech. Supervisory and Regulatory Issues that Merit Authorities’ Attention, Financial Stability Board (Basel) 27 June 2017. Access date: 24 May 2019, p.30. <http://www.fsb.org/wp-content/uploads/R270617.pdf>

³⁴⁴⁸ Financial Stability Implications from FinTech. Supervisory and Regulatory Issues that Merit Authorities’ Attention, Financial Stability Board (Basel) 27 June 2017. Access date: 24 May 2019, p.30. <http://www.fsb.org/wp-content/uploads/R270617.pdf>

³⁴⁴⁹ Financial Stability Implications from FinTech. Supervisory and Regulatory Issues that Merit Authorities’ Attention, Financial Stability Board (Basel) 27 June 2017. Access date: 24 May 2019, p.31. <http://www.fsb.org/wp-content/uploads/R270617.pdf>

6. *Assessing the regulatory perimeter and updating it on a timely basis.* Regulators should be agile when there is a need to respond to fast changes in the FinTech area, and review the regulatory perimeter regularly.³⁴⁵¹
7. *Shared learning with a diverse set of private sector parties.* Authorities should improve communication channels with the private sector and to share their experiences with regulatory sandboxes, accelerators and innovation hubs, as well as other forms of interaction.³⁴⁵²
8. *Further developing open lines of communication across relevant authorities.* Authorities should further improve their mutual communication to ensure preparedness to adverse developments in the FinTech sector.³⁴⁵³
9. *Building staff capacity in new areas of required expertise.* Regulators should ensure they have the adequate resources and skilled employees to address the challenges of FinTech.³⁴⁵⁴
10. *10. Studying alternative configurations of digital currencies.* Authorities should monitor developments in the sector and analyse the potential implications of digital currencies for national monetary policy and financial stability, and the global monetary system.³⁴⁵⁵

Full compliance requires member's actions in line with at least six of the above-mentioned areas. Actions consistent with three to five areas are counted as partial compliance. Otherwise, a G20 member receives a score of -1.

Scoring Guidelines

-1	G20 member takes measures related to FinTech in line with 2 or less action areas identified by the FSB.
0	G20 member takes measures related to FinTech in line with 3 to 5 action areas identified by the FSB.
+1	G20 member takes measures related to FinTech in line with 6 to 10 action areas identified by the FSB.

Argentina: 0

Argentina has partially complied with the commitment on technologies in financial sector.

³⁴⁵⁰ Financial Stability Implications from FinTech. Supervisory and Regulatory Issues that Merit Authorities' Attention, Financial Stability Board (Basel) 27 June 2017. Access date: 24 May 2019, p.31. <http://www.fsb.org/wp-content/uploads/R270617.pdf>

³⁴⁵¹ Financial Stability Implications from FinTech. Supervisory and Regulatory Issues that Merit Authorities' Attention, Financial Stability Board (Basel) 27 June 2017. Access date: 24 May 2019, p.31. <http://www.fsb.org/wp-content/uploads/R270617.pdf>

³⁴⁵² Financial Stability Implications from FinTech. Supervisory and Regulatory Issues that Merit Authorities' Attention, Financial Stability Board (Basel) 27 June 2017. Access date: 24 May 2019, p.32. <http://www.fsb.org/wp-content/uploads/R270617.pdf>

³⁴⁵³ Financial Stability Implications from FinTech. Supervisory and Regulatory Issues that Merit Authorities' Attention, Financial Stability Board (Basel) 27 June 2017. Access date: 24 May 2019, p.32. <http://www.fsb.org/wp-content/uploads/R270617.pdf>

³⁴⁵⁴ Financial Stability Implications from FinTech. Supervisory and Regulatory Issues that Merit Authorities' Attention, Financial Stability Board (Basel) 27 June 2017. Access date: 24 May 2019, p.32. <http://www.fsb.org/wp-content/uploads/R270617.pdf>

³⁴⁵⁵ Financial Stability Implications from FinTech. Supervisory and Regulatory Issues that Merit Authorities' Attention, Financial Stability Board (Basel) 27 June 2017. Access date: 24 May 2019. <http://www.fsb.org/wp-content/uploads/R270617.pdf>

On 11 December 2018, Governor of the Central Bank of Argentina (BCRA) Guido Sandleris and other BCRA leaders met with the winning teams of the last edition of the Financial Innovation Program (Programa de Innovación Financiera, PIF), an initiative that rewards technology-based projects that promote financial inclusion, for example information platform on credit and investment options offered by banks.³⁴⁵⁶

On 7 January 2019, BCRA Governor Guido Sandleris and Chief of the Supreme Court of Justice Eduardo Pettigiani signed an agreement to facilitate the electronic sharing of information between both institutions.³⁴⁵⁷ The purpose of the agreement is to promote the use of technological tools that makes document sharing simpler, faster and more secure.³⁴⁵⁸ Under this agreement, written communications issued by courts will be processed electronically by the BCRA through the Supreme Court's System for Electronic Notices and Filings. This agreement is signed in accordance with the BCRA's policy to promote the modernization and digitalization of document management while reducing the use of paper.³⁴⁵⁹

On 5 April 2019, the BCRA introduced changes to a series of regulations in order to enhance users' financial protection³⁴⁶⁰ and published Communication A 6667, which will regulate digital channels and make this kind of transactions simple and safe.³⁴⁶¹

Argentina has taken measures related to FinTech in line with three action areas identified by the FSB. Thus, it has been awarded a score of 0.

Analyst: Elizaveta Safonkina

Australia: 0

Australia has partially complied with the commitment on technologies in financial sector.

On 22 January 2019, the Australian Payments Council (APC) invited businesses, nongovernmental organizations, government and consumers to comment on what is needed to support payments in the digital economy of the future.³⁴⁶² It launched a consultation paper – “2019 Consultation – Payments in a Global, Digital World” – as it seeks to make this a reality Down Under. According to the APC, this plan will guide industry thinking in areas such as the changing payments mix, open data and digital identity. The current consultation forms part of the plan's first triennial review.³⁴⁶³

³⁴⁵⁶ The winners of the Financial Innovation Program organized by the BCRA, Central Bank of Argentina (Buenos Aires) 11 December 2018. Access Date: 30 January 2019. <http://www.bkra.gov.ar/Noticias/El-directorio-y-ganadores-PIF-i.asp>.

³⁴⁵⁷ Agreement to digitalize documents for information sharing purposes, Central Bank of Argentina (Buenos Aires) 7 January 2019. Access Date: 30 January 2019. <http://www.bkra.gov.ar/Noticias/Convenio-digitalizar-intercambio-informacion-i.asp>.

³⁴⁵⁸ Agreement to digitalize documents for information sharing purposes, Central Bank of Argentina (Buenos Aires) 7 January 2019. Access Date: 30 January 2019. <http://www.bkra.gov.ar/Noticias/Convenio-digitalizar-intercambio-informacion-i.asp>.

³⁴⁵⁹ Agreement to digitalize documents for information sharing purposes, Central Bank of Argentina (Buenos Aires) 7 January 2019. Access Date: 30 January 2019. <http://www.bkra.gov.ar/Noticias/Convenio-digitalizar-intercambio-informacion-i.asp>.

³⁴⁶⁰ Financial Services User Protection—Further Amendments, Central Bank of Argentina (Buenos Aires) 5 April 2019. Access Date: 25 April 2019. <http://www.bkra.gov.ar/Noticias/Proteccion-usuario-financiero-i.asp>.

³⁴⁶¹ Online Time Deposits: At any Bank for non-Clients, Central Bank of Argentina (Buenos Aires) 5 April 2019. Access Date: 25 April 2019. <http://www.bkra.gov.ar/Noticias/Plazo-fijo-online-i.asp>.

³⁴⁶² Australia prepares payments for digital age, Fintech Futures (London) 22 January 2019. Access date: 31 March 2019. <https://www.bankingtech.com/2019/01/australia-prepares-payments-for-digital-age/>

³⁴⁶³ Australia prepares payments for digital age, Fintech Futures (London) 22 January 2019. Access date: 31 March 2019. <https://www.bankingtech.com/2019/01/australia-prepares-payments-for-digital-age/>

On 4 February 2019, it was announced that Regulators will be subjected to a new oversight body and the financial industry's pay will be overhauled to remove conflicts of interest, according to the recommendations of the so-called Royal Commission.³⁴⁶⁴ The recommendations come after the public inquiry heard 11 months of shocking revelations of the financial industry's wrongdoing, including that fees were charged to the accounts of dead people and that cash bribes were paid over the counter to win mortgage business, wiping AUD60 billion from the country's top finance stocks. The government, which was initially opposed to the setting up of the inquiry, promised it would act on all the 76 recommendations.³⁴⁶⁵

On 3 December 2018, Coinzoom Australia said that it was officially registered as a digital currency exchange with financial watchdog Austrac. Austrac, as the Australian Transaction Reports and Analysis Centre is a state-run financial intelligence agency that monitors financial transactions. The registration allows the exchange to operate legally according to Australian law. It will also function as a fiat-to-crypto exchange, with support for a variety of digital assets.³⁴⁶⁶

On 26 March 2019, the Australian Cyber Security Centre (ACSC) launched a nationwide program of cyber resilience and response activities for the electricity industry and for government agencies that have an energy and cyber security role.³⁴⁶⁷ 'The electricity industry provides an essential service for all Australians, and, like other critical infrastructure sectors, is a target for malicious cyber criminals,' said Alastair MacGibbon, Head of the ACSC.³⁴⁶⁸ 'We're inviting participation from across the electricity industry – market and power system operators, generators, storage providers, transmission and distribution network service providers, and retailers – as well as government.'³⁴⁶⁹

On 1 April 2019, the ACSC Partnership Program entered its next phase through the network of Joint Cyber Security Centres (JCSCs), located in Perth, Adelaide, Brisbane, Sydney and Melbourne. The partnership program is run by the ACSC as part of the Australian Government Cyber Security Strategy.³⁴⁷⁰ The strategy has been implemented to ensure Australian governments – state, territory and federal – and institutions, businesses and organisations can take full advantage of current and future digital technologies. Through the JCSC program, the ACSC is driving collaboration around cyber security risks and issues. 'The JCSCs provide a hub for business to collaborate on cyber security issues – as we mature the program, we will increasingly work with partners to co-design solutions to common challenges,' said David George, Head of ACSC's National Collaboration Program.³⁴⁷¹

³⁴⁶⁴ Australia vows to clean up financial sector after landmark misconduct inquiry, Reuters (Canberra) 4 February 2019. Access date: 31 March 2019. <https://www.reuters.com/article/us-australia-banks-inquiry/australia-vows-to-clean-up-financial-sector-after-landmark-misconduct-inquiry-idUSKCN1PT099>

³⁴⁶⁵ Australia vows to clean up financial sector after landmark misconduct inquiry, Reuters (Canberra) 4 February 2019. Access date: 31 March 2019. <https://www.reuters.com/article/us-australia-banks-inquiry/australia-vows-to-clean-up-financial-sector-after-landmark-misconduct-inquiry-idUSKCN1PT099>

³⁴⁶⁶ Australia's Financial Regulator Grants License to Bitcoin Exchange Coinzoom, Bitcoin.com (Seaford) 3 December 2018. Access date: 31 March 2019. <https://news.bitcoin.com/australias-financial-regulator-grants-license-to-bitcoin-exchange-coinzoom/>

³⁴⁶⁷ Plug in to ACSC for cyber resilience, Australian government (Canberra) 1 April 2019. Access Date: 1 May 2019. <https://www.cyber.gov.au/news/plug-in-to-the-acsc>

³⁴⁶⁸ Plug in to ACSC for cyber resilience, Australian government (Canberra) 1 April 2019. Access Date: 1 May 2019. <https://www.cyber.gov.au/news/plug-in-to-the-acsc>

³⁴⁶⁹ Plug in to ACSC for cyber resilience, Australian government (Canberra) 1 April 2019. Access Date: 1 May 2019. <https://www.cyber.gov.au/news/plug-in-to-the-acsc>

³⁴⁷⁰ ACSC program enters its next phase through JCSCs, Australian government (Canberra) 1 April 2019. Access Date: 1 May 2019. <https://www.cyber.gov.au/news/acsc-partnership-program>

³⁴⁷¹ ACSC program enters its next phase through JCSCs, Australian government (Canberra) 1 April 2019. Access Date: 1 May 2019. <https://www.cyber.gov.au/news/acsc-partnership-program>

Australia has taken measures related to FinTech in line with three action areas identified by the FSB. Thus, it has been awarded a score of 0.

Analyst: Anna Kotlyarova

Brazil: 0

Brazil has partially complied with the commitment on technologies in financial sector.

On 3 December 2018, the Central Bank of Brazil held the forum of Financial Market Infrastructure. There was established a plan of an evaluation and promotion of the risk management process for third-party service providers.³⁴⁷²

On 3 December 2018, the President of the Central Bank of Brazil Ilan Goldfajn held the Brazil Risk Revaluation Seminar organized by Getúlio Vargas Foundation. It discussed regulation of credit fintechs, participation of foreign capital in fintechs to facilitate and stimulate competition, cyber security policy, instant payments.³⁴⁷³

On 6 December 2018, the Central Bank of Brazil and the Administrative Council of Economic Defense approved the Joint Normative Act No. 1, which establishes procedures to harmonize and make more efficient the respective actions in acts of concentration and defense of competition within the National Financial System. The Act provides, among other actions, rules for sharing of information between Cade and the Central Bank to carry out activities in the competitive sphere and to hold periodic meetings between the two bodies.³⁴⁷⁴

On 10 December 2018, the Laboratory of Financial and Technological Innovations chose 12 projects that propose technological innovations in the area of finance, aiming at cheapening credit and increasing the efficiency of the National Financial. The proposals include blockchain technologies, artificial intelligence, cybersecurity tools and new application models for technologies already established in the market.³⁴⁷⁵

On 13 February 2019, the Information Security Department held the meetings for the elaboration of the National Information Security Strategy.³⁴⁷⁶

On 22 February 2019, the Central Bank and the National Federation of Central Bank Servers Associations announced an event in which innovations in information technology linked to the National Financial System will be exposed. At the event, the participants will expose the solutions payments, cybersecurity and credit, creation of technological innovation.³⁴⁷⁷

³⁴⁷² Provedores de Serviços Críticos (PSC), Banco do Brasil (Brasília) 3 December 2018. Access Date: 30 March 2019. https://www.bcb.gov.br/content/estabilidadefinanceira/Documents/sistema_pagamentos_brasileiro/Forum_SPB/Provedores_de_Servicos_Criticos.pdf

³⁴⁷³ Apresentação do Presidente Ilan Goldfajn no Seminário Reavaliação do Risco Brasil organizado pela FGV/Rio, Banco do Brasil (Brasília) 3 December 2018. Access Date: <https://www.bcb.gov.br/detalhenoticia/16625/nota>

³⁴⁷⁴ Banco Central e Cade aprovam Ato Normativo Conjunto, Banco do Brasil (Brasília) 6 December 2018. Access Date: 30 March 2019. <https://www.bcb.gov.br/detalhenoticia/16629/nota>

³⁴⁷⁵ Programa desenvolvido pelo BC leva à criação de 12 projetos de inovação para o SFN, Banco do Brasil (Brasília) 10 December 2018. Access Date: 30 March 2019. <https://www.bcb.gov.br/detalhenoticia/16631/nota>

³⁴⁷⁶ Recomeçaram as reuniões para elaboração da Estratégia Nacional de Segurança da Informação, módulo Segurança Cibernética, Departamento de Segurança da Informação (Brasília) 13 February 2019. Access Date: 30 March 2019. <http://dsic.planalto.gov.br/noticias/recomecam-amanha-as-reunioes-para-elaboracao-da-estrategia-nacional-de-seguranca-da-informacao-modulo-seguranca-cibernetica>

³⁴⁷⁷ Seminário debate inovações financeiras e tecnológicas no BC, Banco do Brasil (Brasília) 22 February 2019. Access Date: 30 March 2019. <https://www.bcb.gov.br/detalhenoticia/16684/nota>

On 21 December 2018, the Central Bank of Brazil set the fundamental requirements for the Brazilian instant payment system. It set out the institutional policy for the development of this system, which includes governance for rule-making, forms of participation and centralized settlement infrastructure.³⁴⁷⁸

On 7 March 2019, the Basel Committee on Banking Supervision released the result of the assessment of the Brazilian regulatory framework regarding the long-term liquidity indicator and the exposure limits per customer. The two indicators received the highest score – “Compliant,” which means “fully compliant.”³⁴⁷⁹

Brazil has taken measures related to FinTech in line with four action areas identified by the Financial Stability Board. Thus, it has been awarded a score of 0.

Analyst: Polina Petrova

Canada: 0

Canada has partially complied with the commitment on technologies in financial sector.

On 15 March 2019, Canadian Securities Administrators and the Investment Industry Regulatory Organization of Canada published a consultation paper on Thursday, seeking input from the fintech community on how regulatory requirements can be developed for cryptocurrency platforms.³⁴⁸⁰

On 18 April 2019, it was announced that Government is partnering with groundbreaking digital industries to invest in quantum-related technologies and skills development.³⁴⁸¹ This will mean smarter security systems to better protect Canadians’ homes, more powerful digital security tools to secure their online transactions, and more efficient medicines to improve their health. Minister of Innovation, Science and Economic Development Navdeep Bains and Minister responsible for the Federal Economic Development Agency for Southern Ontario announced a total investment of CAD41 million in one Waterloo-based not-for-profit and three start-up companies developing cutting-edge products that integrate quantum, artificial intelligence and machine learning technologies. The total cost of the projects is CAD101.8 million.³⁴⁸²

Canada has taken measures related to FinTech in line with three action areas identified by the Financial Stability Board. Thus, it has been awarded a score of 0.

Analyst: Uliana Koptyukh

China: 0

China has partially complied with the commitment on technologies in financial sector.

On 11 December 2018, the China- United Kingdom Fintech Bridge Conference was held. The main goal was to increase collaboration between the two sides in promoting financial technologies

³⁴⁷⁸ Agenda BC+: BC define os requisitos fundamentais para o sistema de pagamentos instantâneos brasileiro, Banco do Brasil (Brasília) 21 December 2019. Access Date: 30 March 2019. <https://www.bcb.gov.br/detalhenoticia/16646/nota>

³⁴⁷⁹ Regulação brasileira recebe nota máxima do Comitê de Basileia para Supervisão Bancária, Banco do Brasil (Brasília) 12 March 2019. Access Date : 2 May 2019. <https://www.bcb.gov.br/detalhenoticia/330/noticia>

³⁴⁸⁰ Canada Proposes Regulatory Framework for Cryptocurrency Exchanges, Coindesk (New York) 2 May 2019. Access date: 11 May 2019. <https://www.coindesk.com/canada-proposes-regulatory-framework-for-cryptocurrency-exchanges>

³⁴⁸¹ Government of Canada partners with digital industries to invest in groundbreaking technology and businesses, CISION (Toronto) 18 April 2019. Access date: 11 May 2019. <https://www.newswire.ca/news-releases/government-of-canada-partners-with-digital-industries-to-invest-in-groundbreaking-technology-and-businesses-841793402.html>

³⁴⁸² Government of Canada partners with digital industries to invest in groundbreaking technology and businesses, CISION (Toronto) 18 April 2019. Access date: 11 May 2019. <https://www.newswire.ca/news-releases/government-of-canada-partners-with-digital-industries-to-invest-in-groundbreaking-technology-and-businesses-841793402.html>

innovation and application. As the result of the conference Fintech Bridge Journal was issued providing a guide to enhance Fintech ecosystem and support the Fintech firms and investors working across borders.³⁴⁸³

On 16 January 2019, Beijing authorities set plans to build a national-level cybersecurity industrial park to boost the industry and tap into the potential of domestic tech companies.³⁴⁸⁴

On 24 February 2019, China Law Society held lawmaking seminars where law scholars and central government officials discussed the possibility of new cybersecurity laws.³⁴⁸⁵

On 10 March 2019, deputy governor of the People's Bank of China announced that China will boost the role of financial technology in serving the real economy and preventing financial risks. Pilot programs for fintech application were launched in 10 provincial-level regions including Beijing, Shanghai and Guangdong.³⁴⁸⁶

China has taken measures related to FinTech in line with three action areas identified by the FSB. Thus, it has been awarded a score of 0.

Analyst: Yekaterina Litvintseva

France: 0

France has partially complied with the commitment on technologies in financial sector.

On 4 December 2018, seven European Union members signed declaration to promote blockchain use.³⁴⁸⁷

On 12 December 2018, government officials advocated for a EUR500 million investment in blockchain technology.³⁴⁸⁸

On 13 December 2018, French lawmakers proposed lower electricity rates for cryptocurrency miners.³⁴⁸⁹

On 24 December 2018, a decree adding to the Law Allowing Blockchain Technology to be used to register and transfer unlisted securities was published.³⁴⁹⁰

³⁴⁸³ China-UK Fintech Bridge Conference to boost collaboration and opportunity, Xinhua News Agency (Beijing) 12 December 2019. Access date: 1 May 2019. http://www.xinhuanet.com/english/2018-12/12/c_137666956.htm

³⁴⁸⁴ Beijing builds cybersecurity industrial park, Xinhua News Agency (Beijing) 16 January 2019. Access date: 23 April 2019. http://www.xinhuanet.com/english/2019-01/17/c_137749552.htm

³⁴⁸⁵ China Law Society holds seminars to improve legislation, Xinhua News Agency (Beijing) 24 February 2019. Access date: 23 April 2019. http://www.xinhuanet.com/english/2019-02/24/c_137846482.htm

³⁴⁸⁶ China's central bank eyes greater role for fintech, Xinhua News Agency (Beijing) 10 March 2019. Access date: 22 April 2019. http://www.xinhuanet.com/english/2019-03/10/c_137883248.htm

³⁴⁸⁷ Seven EU States Sign Declaration to Promote Blockchain Use, Cointelegraph (New York) 5 December 2018. Access date: 1 April 2019. <https://cointelegraph.com/news/seven-eu-states-sign-declaration-to-promote-blockchain-use>

³⁴⁸⁸ Des parlementaires préconisent d'investir 500 millions dans la blockchain en trois ans, Les Echos (Paris) 18 December 2018. Access date: 1 April 2019. <https://www.lesechos.fr/tech-medias/hightech/des-parlementaires-preconisent-dinvestir-500-millions-dans-la-blockchain-en-trois-ans-238269>

³⁴⁸⁹ French Lawmakers Propose Lower Electricity Rates for Cryptocurrency Miners, Bitcoin (Paris) 13 December 2018. Access date: 1 April 2019. <https://news.bitcoin.com/french-lawmakers-propose-lower-electricity-rates-for-cryptocurrency-miners/>

³⁴⁹⁰ France Adds the Missing Piece to the Law Allowing Blockchain Technology to be Used to Register and Transfer Unlisted Securities, Kramer Levin Naftalis & Frankel LLP (New York) 10 January 2019. Access date: 1 April 2019. https://www.kramerlevin.com/en/perspectives-search/france-adds-the-missing-piece-to-the-law-allowing-blockchain-technology-to-be-used-to-register-and-transfer-unlisted-securities.html#_ftn5

On 8 March 2019, French Financial Regulator proposed ban on anonymous cryptocurrencies.³⁴⁹¹

On April 11, the National Assembly of France adopted a bill that is designed to stimulate local business development, including redirecting savings from individuals to businesses allowing them to invest in crypto and tokens.³⁴⁹²

On 15 April 2019, Bruno Le Maire, French Minister of the Economy and Finance stated that France will encourage other EU countries to adopt cryptocurrency regulations similar to those France approved before. The news rules reportedly aim to attract cryptocurrency issuers and traders to France by providing them some official recognition, while taxing their profits in return.³⁴⁹³

France has taken measures related to FinTech in line with four action areas identified by the Financial Stability Board. Thus, it has been awarded a score of 0.

Analyst: Dariya Myasnikova

Germany: 0

Germany has partially complied with the commitment on financial regulation.

On 21 February 2019, the start of consultations on blockchain strategy was announced by the Federal government. The aim of the online consultation is to get more information about potential, drivers and barriers to using blockchain technology. It also asks for practical examples in order to get a more complete picture of the use of blockchain technologies in Germany.³⁴⁹⁴

On 28 February 2019, the German Federal Financial Supervisory Authority (BaFin) issued its BaFinPerspectives magazine devoted to the topic of digitalization. The publication is aimed at maintaining consultations with the financial industry, academia, politics and other authorities to constantly reassess the BaFin's digitalization strategy adopted in August 2018.³⁴⁹⁵ The strategy provides for measures to handle market changes that digitalization brings in supervisory practice and regulation; ensure that innovative technologies and information technologysystems and the data that supervised undertakings use are secure; adaptBaFin to meet the demands of ongoing digitalization – both internally and in interaction with the market.³⁴⁹⁶

On 14 March 2019, BaFin announced that it will hold the third BaFin-Tech event on 11 September 2019 in Bonn. This year's BaFin-Tech will focus on the issues of digitalization and financial

³⁴⁹¹ French Financial Regulator Proposes Ban on Anonymous Cryptocurrencies, Coin Telegraph (New York) 8 March 2019. Access date: 1 April 2019. <https://cointelegraph.com/news/french-financial-regulator-proposes-ban-on-anonymous-cryptocurrencies>

³⁴⁹² France Passes Bill to Allow Insurance Providers to Invest in Crypto and Tokens, Cointelegraph (New York) 12 April 2019. Access date: 29 April 2019. <https://cointelegraph.com/news/france-passes-bill-to-allow-insurance-providers-to-invest-in-crypto-and-tokens>

³⁴⁹³ France to Push EU Member States to Adopt Its Cryptocurrency Regulations, Cointelegraph (New York) 15 April 2015. Access date: 29 April 2019. <https://cointelegraph.com/news/reuters-france-to-push-eu-member-states-to-adopt-its-cryptocurrency-regulations>

³⁴⁹⁴ Start of online consultations on blockchain strategy, Federal Ministry of Economic Affairs and Energy (Berlin) 21 February 2019. Access date: 25 June 2019. <https://www.bmw.de/Redaktion/DE/Pressemitteilungen/2019/20190221-start-der-online-konsultation-zur-blockchain-strategie.html>

³⁴⁹⁵ BaFinPerspektiven 01/2019. Vorwort des Präsidenten Felix Hufeld, German Federal Financial Supervisory Authority (Bonn) 28 February 2019. Access Date: 15 April 2019. https://www.bafin.de/SharedDocs/Veroeffentlichungen/DE/BaFinPerspektiven/2019_01/bp_19-1_Vorwort_P.html.

³⁴⁹⁶ BaFinPerspektiven 01/2019. Vorwort des Präsidenten Felix Hufeld, German Federal Financial Supervisory Authority (Bonn) 28 February 2019. Access Date: 15 April 2019. https://www.bafin.de/SharedDocs/Veroeffentlichungen/DE/BaFinPerspektiven/2019_01/bp_19-1_Vorwort_P.html.

technology innovations and include lectures, workshops and panel discussions. The event is aimed at new and established companies in the financial industry as well as at practitioners and academia.³⁴⁹⁷

On 29 March 2019, the Federal Ministry of Finance and the Federal Ministry of Justice and Consumer Protection have jointly published a key-issues paper discussing the possible introduction of electronic securities and the regulation of public offers of certain crypto tokens. The paper forms part of efforts to strengthen Germany's role as one of the world's leading digital technology and fintech locations.³⁴⁹⁸

Germany has taken measures related to FinTech in line with three areas identified by the Financial Stability Board. Thus, it has been awarded a score of 0.

Analyst: Andrey Shelepon

India: -1

India has not complied with the commitment on technologies in financial sector.

On 6 February 2019, The Union Cabinet chaired by the Prime Minister Narendra Modi has approved establishment of a unified authority for regulating all financial services in International Financial Services Centres in India through International Financial Services Centres Authority Bill, 2019.³⁴⁹⁹

India has taken measures related to FinTech in line with one action areas identified by the Financial Stability Board. Thus, it has been awarded a score of -1.

Analyst: Polina Shtanko

Indonesia: 0

Indonesia has partially complied with the commitment on technologies in financial sector.

On 28 December 2018, under Otoritas Jasa Keuangan (OJK), Indonesia's financial services authority, new umbrella regulation on finance companies took effect, which among other things, recognized the growing role of Fintech; in particular, the regulation permits a finance company to conduct operations using an internet-based platform, including marketing, credit-application, and repayment functions; according to the regulation, a finance company that wishes to establish an online platform must have a data center located in Indonesia, appropriate procedures and protocols in place, qualified information technology staff, and a reliable and secure IT system.³⁵⁰⁰

On 15 February 2019, it was reported that Indonesia's Commodity Futures Trading Regulatory Agency (Bappebti) approved the regulation that recognizes Bitcoin and other digital currencies as a trading commodity, giving legal certainty to cryptocurrency exchanges that have been already operating in the country; the regulation outlines a set of requirements in regard to any cryptocurrency

³⁴⁹⁷ Veranstaltung: BaFin-Tech 2019 in Bonn, German Federal Financial Supervisory Authority (Bonn) 14 March 2019. Access Date: 15 April 2019.

https://www.bafin.de/SharedDocs/Veroeffentlichungen/DE/Meldung/2019/meldung_190314_bafin_tech_2019.html.

³⁴⁹⁸ Key-issues paper on the regulatory treatment of electronic securities and crypto tokens, Federal Ministry of Finance (Berlin) 29 March 2019. Access date: 25 June 2019.

https://www.bundesfinanzministerium.de/Content/EN/Standardartikel/Topics/Financial_markets/Articles/2019-03-25-electronic-securities-and-crypto-tokens.html

³⁴⁹⁹ Cabinet approves establishment of a unified authority for regulating all financial services in International Financial Services Centres (IFSCs) in India through International Financial Services Centres Authority Bill, 2019, Public Information Bureau (Delhi) 6 February 2019. Access date: 6 February 2019.

<http://pib.nic.in/newsite/PrintRelease.aspx?relid=188144>

³⁵⁰⁰ Indonesia's OJK Redefines Rules Governing Finance Companies, Lexology (London) 24 January 2019. Access date: 15 April 2019. <https://www.lexology.com/library/detail.aspx?g=1e47c68b-b045-4f61-b788-6b55a46e2520>

circulating in Indonesia, in particular – compliance with risk assessment, anti-money laundering and combating the financing of terrorism requirements, while crypto traders must keep transaction histories for at least five years and have a server located inside the country.³⁵⁰¹

On 18 February 2019, it was reported that Bappebti had also established a legal framework for operating crypto and digital assets futures markets, which requires multiple entities involved in crypto futures trading to seek regulatory approval and apply for registration before legally operating in Indonesia, sets the rules for maintaining by crypto traders abundant closing balances, as well as the requirements for compliance with risk assessment, anti-money laundering and combating the financing of terrorism frameworks.³⁵⁰²

On 3 March 2019, OJK held a national seminar entitled “Millennial Collaboration and Fintech Towards 4.0 Industrial Revolution”; during the seminar it was noted, in particular, that OJK intends to contribute to development of Fintech startups with preparing infrastructure such as the Fintech Center that entrepreneurs can consult with prior to launching a startup, as well as regulatory sandbox arrangements.³⁵⁰³

Indonesia has taken measures related to FinTech in line with three action areas identified by the Financial Stability Board. Thus, it has been awarded a score of 0.

Analyst: Pavel Doronin

Italy: 0

Italy has partially complied with the commitment on technologies in financial sector.

On 27 December 2018, it was announced that the Ministry of Economic Development is selecting representatives for the high-level expert groups together to elaborate the national strategy on artificial intelligence and the national strategy on technologies.³⁵⁰⁴

On 28 December 2018, Ministry of Economic Development, Ministry of Infrastructure and Transport, Ministry of Economy and Finance, as well as the Ministry of Health and the Ministry of the Environment and the Protection of the Territory and the Sea in collaboration with the Regions and Autonomous Provinces of Trento and of Bolzano promptly identified the Operators of essential services (OSE) for each of the sectors envisaged by the NIS Directive (the European Union instrument that has defined the necessary measures to achieve a higher level of security of networks and information systems in Europe) (energy, transport, banking, financial market infrastructures, health, supply and distribution of drinking water and digital infrastructures): this is a total of 465 realities, between public and private.³⁵⁰⁵ At the same time, action was also taken on the measures that

³⁵⁰¹ Indonesia: New Legislation Recognizes Crypto as Trading Commodity. Cointelegraph (New York) 15 February 2019. Access date: 15 April 2019. <https://cointelegraph.com/news/indonesia-new-legislation-recognizes-crypto-as-trading-commodity>

³⁵⁰² Indonesia’s Commodity Futures Regulator Releases Regulation for Crypto Futures Market, Cointelegraph (New York) 18 February 2019. Access date: 15 April 2019. <https://cointelegraph.com/news/indonesias-commodity-futures-regulator-releases-regulation-for-crypto-futures-market>

³⁵⁰³ Help Startup, OJK Opens Free Consultation through the Fintech Center, Detikfinance (Jakarta) 11 March 2019. Access date: 15 April 2019. <https://finance.detik.com/moneter/d-4462482/bantu-startup-ojk-buka-konsultasi-gratis-lewat-fintech-center>

³⁵⁰⁴ Intelligenza artificiale e blockchain: selezionati gli esperti, Ministero dello sviluppo economico (Rome) 27 December 2018. Access date: 30 February 2019. <https://www.mise.gov.it/index.php/it/per-i-media/notizie/2039027-intelligenza-artificiale-e-blockchain-selezionati-gli-esperti>

³⁵⁰⁵ Cybersecurity: ecco i passi avanti dell’Italia, Ministero dello sviluppo economico (Rome) 28 December 2018. Access date: 30 January 2019. <https://www.mise.gov.it/index.php/it/198-notizie-stampa/2039029-cybersecurity-ecco-i-passi-avanti-dell-italia>

the OSEs will have to adopt to manage risks and on the ways in which to assess compliance: one aspect, that of compliance with the rules, which really makes a qualitative leap forward in the culture of cyber security.³⁵⁰⁶

On 30 December 2018, the Italian Government approved Budget law that makes it possible for defrauded savers involved in banking crises apply directly to the Ministry of Economy to obtain reimbursement which increases financial security of population.³⁵⁰⁷

On 25 January 2019, the Director of the Committee for the planning and coordination of financial education activities (in which the Ministry of Economic Development participates) Annamaria Lusardi and Annamaria Lusardi, and the President of Inail, Massimo De Felice, signed a memorandum of understanding for the implementation of initiatives in the field of financial, insurance and social security education. The Memorandum of Understanding contributes to implementing the National Strategy for Financial Education and is aimed at disseminating skills in economics and finance that are useful, both personally and professionally, for a serene approach to managing one's money.³⁵⁰⁸

On 6 February 2019, Italian Government announced the Smarter Italy plan, ready to start by March for EUR 50 million with tenders dedicated to innovation and artificial intelligence to accelerate the digitalization.³⁵⁰⁹

On 8 February 2019, at the Salone degli Arazzi of the Ministry of Economic Development, the second meeting of the groups of experts on Artificial Intelligence was held, on the distributed and Blockchain registers selected to identify with the Ministry of Economic Development the national strategies to be sent to the EU Commission.³⁵¹⁰

On 11 February 2019, Italian government introduced Simplifications Decree that aims to install ultra-wideband electronic communication networks.³⁵¹¹

On 4 March 2019, Italy signed a declaration on the development of the Blockchain within the MED7, the group made up of seven Southern European countries (Italy, Spain, France, Malta, Cyprus, Greece and Portugal). The declaration recognizes itself as the Blockchain and, more generally, technologies based on distributed registers can play a decisive role in the development of these countries. It is therefore necessary to create a technical coordination between countries, to

³⁵⁰⁶ Cybersecurity: ecco i passi avanti dell'Italia, Ministero dello sviluppo economico (Rome) 28 December 2018. Access date: 30 January 2019. <https://www.mise.gov.it/index.php/it/198-notizie-stampa/2039029-cybersecurity-ecco-i-passi-avanti-dell-italia>

³⁵⁰⁷ LEGGE 30 dicembre 2018, n. 145, GAZZETTA UFFICIALE (Rome) 31 December 2018. Access date: 30 March 2019. <https://www.gazzettaufficiale.it/eli/gu/2018/12/31/302/so/62/sg/pdf>

³⁵⁰⁸ Educazione finanziaria sul posto di lavoro: siglato accordo comitato Edufin-Inail, Ministero dello sviluppo economico (Rome) 25 January 2019. Access date: 30 February 2019. <https://www.mise.gov.it/index.php/it/per-i-media/notizie/2039124-educazione-finanziaria-sul-posto-di-lavoro-siglato-accordo-comitato-edu-fin-inail>

³⁵⁰⁹ PA digitale, sul piatto 50 milioni per il procurement "intelligente", CORCOM (Rome) 6 February 2019. Access date: 30 February 2019. <https://www.corrierecomunicazioni.it/pa-digitale/pa-digitale-sul-piatto-50-milioni-per-il-procurement-intelligente/>

³⁵¹⁰ Seconda riunione dei gruppi di esperti su AI e blockchain, Ministero dello sviluppo economico (Rome) 8 February 2019. Access date: 30 February 2019. <https://www.mise.gov.it/index.php/it/per-i-media/notizie/2039210-seconda-riunione-dei-gruppi-di-esperti-su-ai-e-blockchain>

³⁵¹¹ LEGGE 11 febbraio 2019, n. 12, Gazzetta Ufficiale (Rome) 11 February 2019. Access date: 30 February 2019. https://www.gazzettaufficiale.it/atto/serie_generale/caricaDettaglioAtto/originario?atto.dataPubblicazioneGazzetta=2019-02-12&atto.codiceRedazionale=19G00017&elenco30gio

experiment with the use of these technologies and emerging ones (5G, Internet of Things, artificial intelligence).³⁵¹²

On 13 March 2019, a workshop presenting the first pilot project that promotes the application of Blockchain technology to small and medium-sized enterprises was held at the Ministry of Economic Development. The aim is to identify all the advantages of Blockchain technology in terms of product traceability along the supply chain, certification to the consumer of their origin, contrast to counterfeiting, guarantee of the social and environmental sustainability of Made in Italy productions.³⁵¹³

On 19 March 2019, Consob (the Italian Companies and Exchange Commission) started a sixty-day public consultation to launch a national debate on the initial public offerings of crypto currencies. The initiative aims to involve all stakeholders with the aim of arriving at a shared framework of asset definitions and market architecture to allow the legislator to have all the elements to evaluate the terms of a possible regulatory intervention.³⁵¹⁴

Italy has taken measures related to FinTech in line with four action areas identified by the Financial Stability Board. Thus, it has been awarded a score of 0.

Analyst: Svetlana Kochetkova

Japan: +1

Japan has fully complied with the commitment on technologies in financial sector.

On 17 December 2018, it was reported that Financial Services Authority (FSA) had published a draft report which outlined the new framework for addressing cryptocurrencies and Initial Coin Offerings in the country, which is to be further implemented in regulation; the report suggests that restrictions on privacy coin listings, margin trading and transactions in derivatives should be placed, as well as restrictions on the amounts of money individuals will be able to invest in initial coin offerings in order to increase protection; that specific tokens might be subject to regulation, under the purview of the Financial Instruments and Exchange Act, depending on how they are structured; and that customers of crypto dealers cannot expand their portfolio of coins until they get proper registration.³⁵¹⁵

On 9 January 2019, the FSA was looking into ways to prohibit the activities of unregistered crypto investment firms collecting funds in cryptocurrencies and bring them under the Financial Instruments and Exchange Act, which currently regulates only cash-funds.³⁵¹⁶

On 9 January 2019, Japan's Ministry of Economy, Trade and Industry announced the second invitation for public comments on the Draft Cyber/Physical Security Framework to ensure

³⁵¹² L'Italia firma dichiarazione sullo sviluppo della Blockchain con i Paesi del MED7, Ministero dello sviluppo economico (Rome) 4 March 2019. Access date: 30 March 2019. <https://www.mise.gov.it/index.php/it/per-i-media/notizie/2038896-l-italia-firma-dichiarazione-sullo-sviluppo-della-blockchain-con-i-paesi-del-med7>

³⁵¹³ Presentato il primo progetto pilota sulla Blockchain, Ministero dello sviluppo economico (Rome) 13 March 2019. Access date: 30 March 2019. <https://www.mise.gov.it/index.php/it/198-notizie-stampa/2039442-presentato-il-primo-progetto-pilota-sulla-blockchain>

³⁵¹⁴ Criptoasset e Ico, la Consob «preme» per maggiori tutele, il Sole 24 ore (Rome) 19 March 2019. Access date: 30 March 2019. <https://www.ilsole24ore.com/art/finanza-e-mercati/2019-03-19/criptovalute-e-ico-consob-preme-maggiori-tutele-070259.shtml>

³⁵¹⁵ Japanese Regulators Publish New Draft for Domestic Cryptocurrency Framework, CCN (Asker) 17 December 2018. Access date: 15 April 2019. <https://www.ccn.com/japanese-regulators-publish-new-cryptocurrency-regulation-draft>

³⁵¹⁶ Japan May Regulate Unregistered Crypto Investments, Bitcoin News (Tokyo) 9 January 2019. Access date: 15 April 2019. <https://bitcoinnews.com/japan-may-regulate-unregistered-crypto-investments/>

cybersecurity for the entire supply chain under “Society 5.0” and “Connected Industries” to be realized through Internet of Things, artificial intelligence and other advanced technologies.³⁵¹⁷

On 12 January 2019, an additional seven applications for a cryptocurrency exchange license were being considered by FSA (to be approved or rejected within the period of 6 months).³⁵¹⁸

On 15 January 2019, FSA issued the updated Policy Approaches to Strengthen Cyber Security in the Financial Sector, prioritizing identification and analysis of the impact of the development of digitalization on the financial industry, its cybersecurity-related risks and the countermeasures thereof; encouraging financial institutions to respond to changes and study the monitoring method employed by the competent authority responding to these changes;³⁵¹⁹ contributing and responding to discussions on cybersecurity-related international cooperation; and responses to Tokyo Olympic and Paralympic Games in 2020 related challenges (building crisis management in closer cooperation with relevant government agencies and related organizations with the aim of improving communication in the financial sector, and conducting threat intelligence from a broader scope, in preparation for an increase in cyber-attacks, and the occurrence of cross-sectoral attacks and large-scale incidents).³⁵²⁰

On 14 February 2019, the Japan Association of New Economy requested FSA to reduce the current tax rate for crypto trading income from 55 per cent to 20 per cent (the same rate that is applied to stocks and forex markets), and to impose no tax on crypto-to-crypto transactions.³⁵²¹

On 14 February 2019, the FSA published the report on the development of regulations for financial institutions regarding data utilization, which highlights that (1) rules for data protection should be reviewed from the perspective of protecting personal data, in light of the increasing use of data in society, though in reviewing such rules, striking the right balance between protection and utilization of data is important;³⁵²² (2) it is appropriate to allow banks, insurance companies, securities companies, and investment management companies to engage in the business of providing data held to a third party in a manner that relates to their core businesses;³⁵²³ (3) it is appropriate to allow banks, insurance companies, securities companies, and investment management companies to hold

³⁵¹⁷ Invitation for Public Comments on the Draft Cyber/Physical Security Framework, Japan’s Ministry of Economy, Trade and Industry (Tokyo) 9 January 2019. Access date: 15 April 2019. https://www.meti.go.jp/english/press/2019/0109_001.html

³⁵¹⁸ Japan: Seven Cryptocurrency Exchanges Could Receive FSA-Issued Licenses in Six Months, Cointelegraph (New York) 13 January 2019. Access date: 15 April 2019. <https://cointelegraph.com/news/japan-seven-cryptocurrency-exchanges-could-receive-fsa-issued-licenses-in-two-months>

³⁵¹⁹ Update of the Policy Approaches to Strengthen Cyber Security in the Financial Sector, FSA (Tokyo) 15 January 2019. Access date: 15 April 2019. <https://www.fsa.go.jp/en/news/2019/20190115.html>

³⁵²⁰ Update of the Policy Approaches to Strengthen Cyber Security in the Financial Sector, FSA (Tokyo) 15 January 2019. Access date: 15 April 2019. <https://www.fsa.go.jp/en/news/2019/20190115.html>

³⁵²¹ Japan Economic Alliance Asks Financial Regulator FSA to Reduce Tax on Crypto, Cointelegraph (New York) 15 February 2019. Access date: 15 April 2019. <https://cointelegraph.com/news/japan-economic-alliance-asks-financial-regulator-fsa-to-reduce-tax-on-crypto>

³⁵²² Publication of the “Report on the development of regulations for financial institutions regarding data utilization” by the “Study Group on the Financial System” under the Financial System Council, FSA (Tokyo) 14 February 2019. Access date: 15 April 2019. https://www.fsa.go.jp/en/refer/councils/singie_kinyu/20190214.html

³⁵²³ Publication of the “Report on the development of regulations for financial institutions regarding data utilization” by the “Study Group on the Financial System” under the Financial System Council, FSA (Tokyo) 14 February 2019. Access date: 15 April 2019. https://www.fsa.go.jp/en/refer/councils/singie_kinyu/20190214.html

subsidiary companies engaging in a wide range of business relating to data utilization (currently prohibited in Japan to insurance companies).³⁵²⁴

On 21 February 2019, Japan's Finance Minister Taro Aso announced the government was planning to allow non-bank companies to be licensed to handle remittances for amounts larger than the current JPY 1 million (USD 9,000) limit, providing that companies meet minimum capital requirements and other conditions to ensure suitability for handling large-sum money transfers.³⁵²⁵

On 21 February 2019, Japan's Daiwa Securities Group announced the completion of a proof of concept studying the effectiveness of using distributed ledger technology in trade matching processes, as a potentially good solution to achieve the industry-wide optimization of trade matching processes.³⁵²⁶

Japan has taken measures related to FinTech in line with seven action areas identified by the Financial Stability Board. Thus, it has been awarded a score of +1.

Analyst: Pavel Doronin

Korea: 0

Korea has partially complied with the commitment on technologies in financial sector.

On 26 February 2019, the Ministry of Science and Information and Communications Technologies of Korea announced launch of a new training project aimed at promoting expertise in Industry 4.0-related areas such as artificial intelligence, cloud computing, big data, blockchain and fintech. The participants will be provided with financial support of total amount almost reaching 8 billion won for next five years. The Ministry plans to involve 10,000 individuals in the framework of the project.³⁵²⁷

On 19 March 2019, amendments to the Act on the Promotion of IT Network Use and Information Protection (Networking Act) of Korea came into force. The law requires digital communications providers who deal with Korean data but have no physical presence in the country to establish a domestic representative to deal with data protection issues.³⁵²⁸

On 21-22 March 2019, an international conference on finance and financial technologies was held in Ha Noi, Vietnam. Korea's Financial Supervisory Service was among co-organizers of the event; several topics including application of fintech and development of banking sector were discussed.³⁵²⁹

Korea has taken measures related to FinTech in line with three action areas identified by the Financial Stability Board. Thus, it has been awarded a score of 0.

Analyst: Alexander Ignatov

³⁵²⁴ Publication of the "Report on the development of regulations for financial institutions regarding data utilization" by the "Study Group on the Financial System" under the Financial System Council, FSA (Tokyo) 14 February 2019. Access date: 15 April 2019. https://www.fsa.go.jp/en/refer/councils/singie_kinyu/20190214.html

³⁵²⁵ Japan to Allow Non-Banks to Handle Large Remittances, Regulation Asia (Hong Kong) 21 February 2019. Access date: 15 April 2019. <https://www.regulationasia.com/japan-to-allow-non-banks-to-handle-large-remittances/>

³⁵²⁶ Daiwa Securities Completes Trade Matching POC Using DLT, Regulation Asia (Hong Kong) 21 February 2019. Access date: 15 April 2019. <https://www.regulationasia.com/daiwa-securities-completes-trade-matching-poc-using-dlt/>

³⁵²⁷ South Korea to Expand Pool of ICT Experts, Business Korea (Seoul) 26 February 2019. Access date: 2 April 2019. <http://www.businesskorea.co.kr/news/articleView.html?idxno=29519>

³⁵²⁸ South Korea Privacy Law Changes May Help EU Data Transfer Talks, Bloomberg (London) 19 March 2019. Access date: 2 April 2019. <https://news.bloomberglaw.com/privacy-and-data-security/south-korea-privacy-law-changes-may-help-eu-data-transfer-talks>

³⁵²⁹ Viet Nam, South Korea to intensify co-operation in finance, Vietnam News (Ha Noi) 22 March 2019. Access date: 2 April 2019. http://bizhub.vn/news/viet-nam-south-korea-to-intensify-co-operation-in-finance_304182.html

Mexico: -1

Mexico has not complied with the commitment on technologies in financial sector.

On 8 January 2019, the President of the Republic presented the program of Promoting the Financial Sector and pointed out that one of its aims is better financial regulation in order to make the financial system more competitive, more resilient and deeper and thus strengthen a fundamental level of development.³⁵³⁰

Mexico has taken measures related to FinTech in line with one action area identified by the Financial Stability Board. Thus, it has been awarded a score of -1.

Analyst: Nadezhda Kamenkovich

Russia: 0

Russia has partially complied with the commitment on technologies in financial sector.

On 6 December 2018, Deputy Finance Minister Alexei Lavrov took part in the IV scientific and practical conference: "Smart control: Digital technologies and platform solutions in control and supervisory activities." The Deputy Minister said that for the first time in the new edition of the Budget Code a special chapter will be devoted to information systems in the sphere of budget legal relations.³⁵³¹

In December 2018, Central Bank of Russian Federation issued the Report on application of cloud technologies in the financial market for public consultations.³⁵³² This report describes the main approaches to the introduction of cloud technologies and the creation of cloud infrastructure in the financial market, describes the scenarios for the implementation of cloud services by financial organizations in different countries, as well as analyzes the approaches of financial regulators to risk management and regulation in this field.³⁵³³ The purpose of the report is to identify possible areas of application of cloud technologies in the financial sector, as well as to develop measures necessary for the development of cloud services for the financial market and to make recommendations on the appropriate regulation.³⁵³⁴

On 8 February 2019, the service, which facilitates remote control of authority over corporate accounts for operations in bank branches, received legal status.³⁵³⁵ The relevant document was registered by the Ministry of Justice of Russia. The changes will allow this service to be introduced by all credit organizations and will contribute to a significant reduction in banks' costs of servicing

³⁵³⁰ Diversas intervenciones durante la Presentación del Programa de Impulso al Sector Financiero, Mexican Government (Mexico) 8 January 2019. Access date 21 March 2019. <https://www.gob.mx/presidencia/prensa/diversas-intervenciones-durante-la-presentacion-del-programa-de-impulso-al-sector-financiero>

³⁵³¹ Deputy Finance Minister Alexei Lavrov took part in the IV scientific conference: "Smart control: Digital technologies and platform solutions in control and supervisory activities", Russian Ministry of Finance (Moscow) 6 December 2018. Access date: 16 February 2019. https://www.minfin.ru/ru/search/?q_4=%D1%82%D0%B5%D1%85%D0%BD%D0%BE%D0%BB%D0%BE%D0%B3&source_id_4=6

³⁵³² Application of cloud technologies in the financial market, Bank of Russia December (Moscow) 2018. Access date: 23 May 2019. https://www.cbr.ru/Content/Document/File/59559/Consultation_Paper_181218.pdf

³⁵³³ Application of cloud technologies in the financial market, Bank of Russia December (Moscow) 2018. Access date: 23 May 2019. https://www.cbr.ru/Content/Document/File/59559/Consultation_Paper_181218.pdf

³⁵³⁴ Application of cloud technologies in the financial market, Bank of Russia December (Moscow) 2018. Access date: 23 May 2019. https://www.cbr.ru/Content/Document/File/59559/Consultation_Paper_181218.pdf

³⁵³⁵ The first draft of the regulatory platform of the Bank of Russia received a legal basis, Bank of Russia (Moscow) 8 February 2019. Access date: 23 May 2019. <https://www.cbr.ru/press/event/?id=2404>

corporate clients, as well as speeding up operations in branches.³⁵³⁶ This service became the first project of Bank of Russia's Regulatory platform, which was launched in 2018. It was created for testing innovative financial services and technologies, the use of which requires a change in regulation.³⁵³⁷

On 18 March 2019, the State Duma Committee recommended a draft bill on digital financial assets for second reading. According to the document, legal entities or individual entrepreneurs have the right to issue digital financial assets in cooperation with a special information system operator that maintains a register of users. The concept of digital operational signs is introduced.³⁵³⁸ This is a set of electronic data (digital code or designation) obtained according to the rules of information systems of digital financial assets and not related to them. The operator of the information system in which the issuance of digital financial assets is carried out must be registered in the Russian Federation - this may be a credit institution, a depository, or a person entitled to carry out the activities of a trade organizer.³⁵³⁹ Requirements for such operators will be determined by the Central Bank. The draft law provides for the concept of "digital financial asset exchange operator." Through such an operator, it is planned to conclude transactions for the sale and purchase of digital financial assets, the exchange of assets of one type for assets of another type or for digital operational marks. Asset exchange operators may be credit organizations, trade organizers or investment platforms.³⁵⁴⁰

On 8 April 2019, the Roadmap for the implementation of the main directions for the development of the financial market in 2019-2021 was presented. Among major goals for the financial market development Bank of Russia indicated creation and development of digital financial infrastructure.³⁵⁴¹ This will imply development of cyber security standards, creating a friendly environment for technology development including RegTech, determining validation approaches, algorithms and programs, development of a high-tech consumer protection system in financial services.³⁵⁴²

On 17 April 2019, the All-Russian Week of Financial Literacy for Children and Youth was opened. Director of the Department of International Financial Relations of the Ministry of Finance of Russia Andrey Bokarev said that this year, special attention is paid to the aspects of digital financial literacy.³⁵⁴³

Russia has taken measures related to FinTech in line with three action areas identified by the Financial Stability Board. Thus, it has been awarded a score of 0.

Analyst: Anna Piekalnits

³⁵³⁶ The first draft of the regulatory platform of the Bank of Russia received a legal basis, Bank of Russia (Moscow) 8 February 2019. Access date: 23 May 2019. <https://www.cbr.ru/press/event/?id=2404>

³⁵³⁷ The first draft of the regulatory platform of the Bank of Russia received a legal basis, Bank of Russia (Moscow) 8 February 2019. Access date: 23 May 2019. <https://www.cbr.ru/press/event/?id=2404>

³⁵³⁸ State Duma Committee recommended a draft bill on digital financial assets for second reading, TASS (Moscow) 18 March 2019. Access date: 8 May 2019. <https://tass.ru/ekonomika/6231060>

³⁵³⁹ State Duma Committee recommended a draft bill on digital financial assets for second reading, TASS (Moscow) 18 March 2019. Access date: 8 May 2019. <https://tass.ru/ekonomika/6231060>

³⁵⁴⁰ State Duma Committee recommended a draft bill on digital financial assets for second reading, TASS (Moscow) 18 March 2019. Access date: 8 May 2019. <https://tass.ru/ekonomika/6231060>

³⁵⁴¹ Main Directions Of Development Of The Financial Market Russian Federation For The Period 2019–2021, Bank of Russia (Moscow) 2019. Access date: 23 May 2019. https://www.cbr.ru/Content/Document/File/71220/main_directions.pdf

³⁵⁴² Main Directions Of Development Of The Financial Market Russian Federation For The Period 2019–2021, Bank of Russia (Moscow) 2019. Access date: 23 May 2019. https://www.cbr.ru/Content/Document/File/71220/main_directions.pdf

³⁵⁴³ The 5th All-Russian Financial Literacy Week kicked off in Moscow, Ministry of Finance of the Russian Federation (Moscow) 17 April 2019. Access date: 8 May 2019. https://www.minfin.ru/ru/press-center/?id_4=36597&mode_4=default&TYPE_ID_4%5B0%5D=1&area_id=4&page_id=2119&popup=Y

Saudi Arabia: 0

Saudi Arabia has partially complied with the commitment on technologies in financial sector.

On 29 January 2019, the Saudi Arabian Monetary Authority (SAMA) and the United Arab Emirates Central Bank presented a joint statement on the common digital currency project “Aber.” The digital currency is designed for financial settlements between the two countries through blockchain-related instruments and technologies.³⁵⁴⁴

On 11 February 2019, the SAMA begun the designation of a sandbox regulatory environment to assess the impact of new technologies in financial services market of the country and enhance its further development in line with Saudi Arabia’s Vision 2030.³⁵⁴⁵

On 14 February 2019, the SAMA inaugurated “Tanfeith” program to provide direct link between the technological systems of government and banks operating in the Kingdom. SAMA pointed out that the electronic link with “Tanfeeth” program ensures the confidentiality of the information and informs judges thereof within the framework of the procedures of handling cases considered by them including personal status cases (expenses and inheritance).³⁵⁴⁶

On 5 March 2019, the SAMA announced the issuance of the Rules Regarding Agent Banking.³⁵⁴⁷ The Rules aim to expand the scope of banking services and products; enhance financial inclusion for the unbanked or underbanked population while maintaining the soundness and stability of the banking sector; encourage banks to contract with agents when offering banking services to reduce the cost of banking services; provide a regulatory and supervisory framework for Agent Banking, which will enable the offering of banking services and products whilst ensuring full compliance with the Banking Control Law and SAMA’s instructions; provide the minimum standards and requirements for Agent Banking; outline the permissible activities that can be carried out by a Banking Agent; and provide a set of minimum standards of data and network security, consumer protection and risk management to be adhered to in the conduct of Agent Banking.³⁵⁴⁸

On 23 April 2019, the SAMA and the Minister of Justice of Saudi Arabia signed an agreement on enhancing cooperation between the two governmental bodies. The purpose of the agreement is to facilitate exchange of banking information to utilize and expand digital services and to improve SAMA system infrastructure and judicial procedures.³⁵⁴⁹

On 25 April 2019, the SAMA, represented by Saudi Payments, has entered into agreement with Vocalink & IBM to develop the new instant payments system planned for launch at the end of 2020. The development of such system is primarily to promote economic development by increasing the

³⁵⁴⁴ A statement on launching “Aber” project, the common digital currency between Saudi Arabian Monetary Authority (SAMA) and United Arab Emirates Central Bank (UAECEB), Saudi Arabian Monetary Authority (Riyadh) 29 January 2019. Access date: 6 May 2019. <http://www.sama.gov.sa/en-US/News/Pages/news29012019.aspx>

³⁵⁴⁵ SAMA launches regulatory sandbox for financial institution’s and fintechs, Saudi Arabian Monetary Authority (Riyadh) 11 February 2019. Access date: 6 May 2019. <http://www.sama.gov.sa/en-US/News/Pages/news11022019.aspx>

³⁵⁴⁶ SAMA inaugurates “Tanfeeth” (enforcement) program to provide direct link between technological systems of government with banks, Saudi Arabian Monetary Authority (Riyadh) 14 February 2019. Access date: 6 May 2019. <http://www.sama.gov.sa/en-US/News/Pages/news14022019.aspx>

³⁵⁴⁷ SAMA issues the rules regulating agent banking, Saudi Arabian Monetary Authority (Riyadh) 5 March 2019. Access date: 6 May 2019. <http://www.sama.gov.sa/en-US/News/Pages/news05032019.aspx>

³⁵⁴⁸ SAMA issues the rules regulating agent banking, Saudi Arabian Monetary Authority (Riyadh) 5 March 2019. Access date: 6 May 2019. <http://www.sama.gov.sa/en-US/News/Pages/news05032019.aspx>

³⁵⁴⁹ SAMA governor and the Minister of Justice signed a digital link agreement “Tanfeith-Execution” Programme, Saudi Arabian Monetary Authority (Riyadh) 23 April 2019. Access date: 6 May 2019. <http://www.sama.gov.sa/en-US/News/Pages/news0023042019.aspx>

efficiency of the financial system, and increasing the effectiveness of financial transactions among all parties.³⁵⁵⁰

Saudi Arabia has taken measures related to FinTech in line with five action areas identified by the FSB. Thus, it has been awarded a score of 0.

Analyst: Alexander Ignatov

South Africa: 0

South Africa has partially complied with the commitment on technologies in financial sector.

On 11 December 2018, National Treasury invited public comments on the draft Conduct of Financial Institutions Bill 2018. The bill is the next phase of the legislative reforms aimed at strengthening the regulation of how the financial services industry treats its customers. The Bill follows the Financial Sector Regulation Act No 9 of 2017, which established two new authorities with dedicated mandates. The two new authorities are the Prudential Authority which manages prudential risk (financial health), and the Financial Sector Conduct Authority which manages the market conduct risk across all financial institutions.³⁵⁵¹

On 16 January 2019, the Financial Intelligence Centre, Financial Sector Conduct Authority, National Treasury, South African Revenue Service and the South African Reserve Bank (SARB) released a consultation paper on crypto assets. The aim of the paper is to develop a common understanding among regulators and policymakers of fintech developments, as well as policy and regulatory implications for the financial sector and economy. The approach to reviewing fintech innovation is a balanced one, considering both its benefits as well as taking cognisance of associated risks.³⁵⁵²

In January 2019, the SARB announced the opening admission for the Graduate Development Programme. During the programme, graduates will attend courses at the SARB Academy for approximately 30 days. Courses include monetary policy, macroprudential policy and financial stability, bank supervision and regulation, financial markets and reserves management, currency issuance and management as well as personal and professional skills such as making presentations, impactful reporting, data analysis, teamwork, personal mastery and diplomacy.³⁵⁵³

On 2-3 May 2019, the Financial Stability Board (FSB) Regional Consultative Group (RCG) for Sub-Saharan Africa held its meeting. Members considered the FSB's work to address new and emerging vulnerabilities in the financial system including FinTech developments and cyber resilience. RCG members were updated on the FSB's work to evaluate the effects of the post-crisis reforms, in

³⁵⁵⁰ In line with the objectives of financial sector development program to achieve digital transformation in the payments sector, an instant payments system will be developed to facilitate and accelerate financial transactions amongst banks, Saudi Arabian Monetary Authority (Riyadh) 25 April 2019. Access date: 6 May 2019. <http://www.sama.gov.sa/en-US/News/Pages/news25042019.aspx>

³⁵⁵¹ Media Statement Invitation for public comments on the draft Conduct of Financial Institutions Bill 2018, South African National Treasury (Pretoria) 11 December 2018. Access date: 8 May 2019. http://www.treasury.gov.za/comm_media/press/2018/2018121101%20Media%20statement%20-%20COFI%20Bill.pdf

³⁵⁵² Statement on crypto assets, South African Reserve Bank (Pretoria) 16 January 2019. Access date: 8 May 2019. https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/9037/Joint%20media%20statement_crypt%20assets%20consultation%20paper.pdf

³⁵⁵³ South African Reserve Bank Graduate Development Programme, South African Reserve Bank (Pretoria) January 2019. Access date: 8 May 2019. <https://www.resbank.co.za/AboutUs/Departments/SARBCollege/Documents/2019%20Graduate%20Development%20Programme%20Advert.pdf>

particular an ongoing evaluation of the impact on financing of small and medium-sized enterprises. South African representatives took part in the meeting.³⁵⁵⁴

South Africa has taken measures related to FinTech in line with four action areas identified by the FSB. Thus, it has been awarded a score of 0.

Analyst: Arseniy Zakharov

Turkey: 0

Turkey has partially complied with the commitment on technologies in financial sector.

On 25 December 2018, Turkey's Banking Regulatory and Supervisory Authority presented for public consultation the Draft Regulation on Banks' Information Systems and Electronic Banking Services, which will introduce the rules and procedures regarding management of information systems, provision of electronic banking services, and risk management.³⁵⁵⁵ According to Draft Regulation:

A Turkish bank may use cloud services if the service is specifically assigned to deliver services to banks, and the cloud deployment model complies with banking regulations in relation to services falling within the scope of primary and secondary systems; and if the Banking Regulatory and Supervisory Authority's approval is obtained to deploy public cloud services for activities such as core banking application, credit and credit card practices and payment services.³⁵⁵⁶

Regarding the transfer of customer data to third parties, Turkish banks will only be able to share data if the scope of the transfer is explicitly specified and the customer's explicit consent is obtained in writing or through a permanent data register for evidentiary purposes.³⁵⁵⁷ The customer must be informed of the transfer and must be offered an option regarding the transfer. Consent cannot be made a condition to the provision of banking services.³⁵⁵⁸ Further, regardless of customers' explicit consent, the transfer of customer data outside Turkey will be subject to the Banking Regulatory and Supervisory Authority's approval. Banking operations that by nature require interaction with banks, payment or messaging systems located abroad, will be exempt from this condition.³⁵⁵⁹

Turkey has taken measures related to FinTech in line with four action areas identified by the Financial Stability Board. Thus, it has been awarded a score of 0.

Analyst: Pavel Doronin

³⁵⁵⁴ Sub-Saharan Africa group meets to discuss FSB activities, regulatory developments and financial vulnerabilities, FSB (Basel) 3 May 2019. Access date: 8 May 2019. <http://www.fsb.org/2019/05/sub-saharan-africa-group-meets-to-discuss-fsb-activities-regulatory-developments-and-financial-vulnerabilities/>

³⁵⁵⁵ BRSA Opens Regulation on Banking Information Systems for Public Consultation, Esin Attorney Partnership Legal Alert (Ankara) 1 January 2019. Access date: 15 April 2019. <http://esinexchange.com/rv/ff004544702bca109e5111468841b1189ddbd14c>

³⁵⁵⁶ BRSA Opens Regulation on Banking Information Systems for Public Consultation, Esin Attorney Partnership Legal Alert (Ankara) 1 January 2019. Access date: 15 April 2019. <http://esinexchange.com/rv/ff004544702bca109e5111468841b1189ddbd14c>

³⁵⁵⁷ BRSA Opens Regulation on Banking Information Systems for Public Consultation, Esin Attorney Partnership Legal Alert (Ankara) 1 January 2019. Access date: 15 April 2019. <http://esinexchange.com/rv/ff004544702bca109e5111468841b1189ddbd14c>

³⁵⁵⁸ BRSA Opens Regulation on Banking Information Systems for Public Consultation, Esin Attorney Partnership Legal Alert (Ankara) 1 January 2019. Access date: 15 April 2019. <http://esinexchange.com/rv/ff004544702bca109e5111468841b1189ddbd14c>

³⁵⁵⁹ BRSA Opens Regulation on Banking Information Systems for Public Consultation, Esin Attorney Partnership Legal Alert (Ankara) 1 January 2019. Access date: 15 April 2019. <http://esinexchange.com/rv/ff004544702bca109e5111468841b1189ddbd14c>

United Kingdom: +1

United Kingdom has fully complied with the commitment on technologies in financial sector.

On 19 December 2018, Policy paper “Tax on cryptoassets” was issued by Her Majesty’s Revenue & Customs (HMRC). This paper sets out HMRC’s view of the appropriate tax treatment of cryptoassets, based on the law as it stands on the date of publication. HMRC has also published guidance for people who hold cryptoassets (or cryptocurrency as they are also known), explaining what taxes they may need to pay, and what records they need to keep. HMRC will publish further information about the tax treatment of cryptoasset transactions involving businesses and companies.³⁵⁶⁰

On 21 December 2018, the Government published an Initial National Cyber Security Skills Strategy. The Initial National Cyber Security Skills Strategy sets out the Government’s understanding of the challenge that evolving cyber threats present to the demand for cyber security skills.³⁵⁶¹

On 28 January 2019, Business Secretary Greg Clark announced a pack of measures for the United Kingdom to become a world leader in the race against some of the most damaging cyber security threats.³⁵⁶² Up to GBP 70 million in government investment will be allocated through the Industrial Strategy Challenge Fund. This investment will support research into the design and development of hardware so that they will be more secure and resilient from the outset.³⁵⁶³ This aims to ‘design out’ many forms of cyber threats by ‘designing in’ security and protection technology/solutions into hardware and chip designs, ultimately helping to eradicate a significant proportion of the current cyber risks for businesses and services in future connected smart products. A further GBP 30 million of government investment will aim to ensure smart systems are safe and secure. Smart internet connected devices can include anything from operating a central heating thermostat via a smart phone, to pressing a button to unlock the front door.³⁵⁶⁴

On 5 March 2019, Bank of England issued Financial Policy Summary and Record of the Financial Policy Committee Meeting that was held on 26 February 2019. The Financial Policy Committee (FPC) aims to ensure the UK financial system is resilient to, and prepared for, the wide range of risks it could face and cyber-risks are among most important issues. The summary says that “the Bank would use regular cyber stress tests to test firms’ ability to meet these ‘impact tolerances’ in severe but plausible scenarios. It would run an exploratory pilot of the approach to stress testing in 2019, focussed on firms’ ability to restore payment services.³⁵⁶⁵”

On 22 March 2019, Bank of England issued a Bulletin “Embracing the promise of fintech”. This bulletin contains information on how Bank of England approaches the development of financial

³⁵⁶⁰ Tax on cryptoassets, UK Government (London) 19 December 2018. Access date: 8 May 2019.

³⁵⁶¹ Cyber Security Skills Strategy, UK Government (London) 21 December 2018. Access date: 8 May 2019.

<https://www.gov.uk/government/publications/cyber-security-skills-strategy>

³⁵⁶² ‘Designing out’ cyber threats to businesses and personal data, UK Government (London) 28 January 2019. Access date: 6 May 2019. <https://www.gov.uk/government/news/designing-out-cyber-threats-to-businesses-and-personal-data>

³⁵⁶³ ‘Designing out’ cyber threats to businesses and personal data, UK Government (London) 28 January 2019. Access date: 6 May 2019. <https://www.gov.uk/government/news/designing-out-cyber-threats-to-businesses-and-personal-data>

³⁵⁶⁴ ‘Designing out’ cyber threats to businesses and personal data, UK Government (London) 28 January 2019. Access date: 6 May 2019. <https://www.gov.uk/government/news/designing-out-cyber-threats-to-businesses-and-personal-data>

³⁵⁶⁵ Financial Policy Summary and Record of the Financial Policy Committee Meeting on 26 February 2019, Bank of England (London) 5 March 2019. Access date: 21 June 2019. <https://www.bankofengland.co.uk/-/media/boe/files/financial-policy-summary-and-record/2019/march-2019.pdf?la=en&hash=984FDE1B860F4BCE65B4E93203C30E9E6C5A8673>

technologies. To embrace the potential of fintech the Bank of England is understanding how fintech developments may affect systemic stability, evaluating how fintech developments may affect the safety and soundness of firms and applying fintech, where appropriate, to enhance our capabilities. Bank of England actions are taken in multiple areas of financial technologies development: cryptoassets and financial stability, new Bank Start-up Unit, Distributed Ledger Technology and others.³⁵⁶⁶

On 16 April 2019, National Cyber Security Centre launched an online tool which helps organisations find out how resilient they are to cyber attacks and practise their response in a safe environment. This iteration of Exercise in a Box has been piloted with small and medium enterprises, local government and the emergency services.³⁵⁶⁷

On 29 April 2019, Financial Conduct Authority announced that 29 businesses have been accepted into cohort 5 of the regulatory sandbox to test innovative products, services, business models and delivery mechanisms. Examples of propositions that have been accepted include digital identity solutions, platforms which tokenise issuance of financial instruments, and services aimed at facilitating greater access to financial services for vulnerable consumers.³⁵⁶⁸

On 1 May 2019, it was announced that the Department for Digital, Culture, Media and Sport launched a consultation process on regulatory proposals regarding consumer Internet of Things security. The proposals set out in this consultation seek to better protect consumers' privacy and online security which can be put at risk by insecure devices.³⁵⁶⁹

United Kingdom has taken measures related to FinTech in line with seven action areas identified by the FSB. Thus, it has been awarded a score of +1.

Analyst: Irina Popova

United States: 0

United States has partially complied with the commitment on technologies in financial sector.

On 20 December 2018, Financial Industry Regulatory Authority (FINRA) published its Report on Selected Cybersecurity Practices – 2018, a detailed review of effective information-security controls at securities firms. The report represents the newest initiative in FINRA's ongoing effort to help broker-dealers – including small firms – further develop their cybersecurity programs.³⁵⁷⁰

On 30 April 2019, the Department of Homeland Security's Cybersecurity and Infrastructure Security Agency released the inaugural set of National Critical Functions. These are functions used or supported by government and the private sector that are of such vital importance to the United States that their disruption, corruption, or dysfunction would have a debilitating effect on security,

³⁵⁶⁶ Quarterly Bulletin 2019 Q1 © Bank of England 2019 ISSN 2399-4568 Topical article Embracing the promise of fintech, Bank of England (London) 22 March 2019. Access date: 21 June 2019. <https://www.bankofengland.co.uk/-/media/boe/files/quarterly-bulletin/2019/embracing-the-promise-of-fintech.pdf?la=en&hash=2445D5B3AF10096FDAA91564BB48F8E5F28486B9>

³⁵⁶⁷ Exercise in a Box, National Cyber Security Centre (London) 16 April 2019. Access date: 21 June 2019. <https://www.ncsc.gov.uk/information/exercise-in-a-box>

³⁵⁶⁸ Regulatory sandbox - cohort 5, Financial Conduct Authority (London) 29 April 2019. Access date: 21 June 2019. <https://www.fca.org.uk/firms/regulatory-sandbox/cohort-5>

³⁵⁶⁹ Consultation on regulatory proposals on consumer IoT security, UK Government (London) 1 May 2019. Access date: 6 May 2019. <https://www.gov.uk/government/consultations/consultation-on-regulatory-proposals-on-consumer-iot-security>

³⁵⁷⁰ FINRA Publishes Report on Selected Cybersecurity Practices – 2018, Financial Industry Regulatory Authority (Washington) 20 December 2018. Access date: 6 May 2019. <http://www.finra.org/newsroom/2018/finra-publishes-report-selected-cybersecurity-practices-2018>

national economic security, national public health or safety, or any combination thereof. Financial sector is referred to as one of the critical spheres of national security.³⁵⁷¹

On 2 May 2019, President Trump signed an Executive Order directing the federal government to take critical steps to strengthen America's cybersecurity workforce. Importantly, the Executive Order will enhance mobility of country's frontline cybersecurity practitioners, support the development of their skills to encourage excellence in the field, and help ensure the United States keeps its competitive edge in cybersecurity. The United States currently has a shortage of 300,000 cybersecurity practitioners.³⁵⁷²

United States has taken measures related to FinTech in line with three action areas identified by the Financial Stability Board. Thus, it has been awarded a score of 0.

Analyst: Dmitry Lukanin

European Union: +1

European Union has fully complied with the commitment on technologies in financial sector.

On 10 April 2019, the European Supervisory Authorities (ESAs) published a Joint Advice on the need for legislative improvements relating to information and communications technologies (ICT) risk management requirements in the European Union financial sector. Among other things the ESAs suggested that a legislative solution for an appropriate oversight framework to monitor the activities of critical third party service providers should be considered.³⁵⁷³

On 11 December 2018, the European Parliament, the Council and the European Commission reached a political agreement on the Cybersecurity Act which reinforced the mandate of the European Union Agency for Network and Information and Security (ENISA) so as to better support Member States with tackling cybersecurity threats and attacks.³⁵⁷⁴ The Act also established an EU framework for cybersecurity certification, boosting the cybersecurity of online services (financial and others) and consumer devices.³⁵⁷⁵ The Cybersecurity Act was proposed in 2017 as part of a wide-ranging set of measures to deal with cyber-attacks and to build strong cybersecurity in the EU. In addition, ENISA would help increase cybersecurity capabilities at EU level and support capacity building and preparedness. Finally, ENISA would be an independent centre of expertise that would help promote high level of awareness of citizens and businesses but also assist EU Institutions and Member States in policy development and implementation.³⁵⁷⁶

On 21 January 2019, a conference on cybersecurity standardization was held in Brussels, Belgium. The draft "EU Cybersecurity Act," proposed one year ago, intended to establish a European

³⁵⁷¹ CISA Releases National Critical Functions Set, Homeland Security (Washington) 30 April 2019. Access date: 6 May 2019. <https://www.dhs.gov/cisa/news/2019/04/30/cisa-releases-national-critical-functions-set>

³⁵⁷² White House Cybersecurity Workforce Executive Order Bolsters U.S. Frontline Defenses, Aids Job Creation, Homeland Security (Washington) 2 May 2019. Access date: 6 May 2019. <https://www.dhs.gov/cisa/news/2019/05/02/white-house-cybersecurity-workforce-executive-order-bolsters-us-frontline>

³⁵⁷³ ESAs Publish Joint Advice on Information and Communication Technology Risk Management and Cybersecurity, European Banking Authority (London) 10 April 2019. Access date: 29 April 2019. <https://eba.europa.eu/-/esas-publish-joint-advice-on-information-and-communication-technology-risk-management-and-cybersecurity>.

³⁵⁷⁴ Cybersecurity Act, European Commission (Brussels) 11 December 2018. Access date: 15 February 2019. https://ec.europa.eu/commission/news/cybersecurity-act-2018-dec-11_en.

³⁵⁷⁵ Cybersecurity Act, European Commission (Brussels) 11 December 2018. Access date: 15 February 2019. https://ec.europa.eu/commission/news/cybersecurity-act-2018-dec-11_en.

³⁵⁷⁶ Cybersecurity Act, European Commission (Brussels) 11 December 2018. Access date: 15 February 2019. https://ec.europa.eu/commission/news/cybersecurity-act-2018-dec-11_en.

cybersecurity certification framework for ICT products, services and processes.³⁵⁷⁷ Standardization would play an important role in the new framework ensuring among other things financial stability. It was therefore crucial for all stakeholders (standardizers, policy makers, industry) to check where they stand today, so the conference was organized. It discussed the remaining challenges in the standardization landscape for Cybersecurity in light of the new Act. The consequences for policy makers, industry, citizens, certification bodies, and the European Standardization System were also covered.³⁵⁷⁸ The conference aimed to foster the dialogue among policy makers, industry, research, standardization organizations, certification organizations and those involved in the development of the ICT certification framework in Europe, in view of an effective implementation of the Cybersecurity Act upon its adoption.³⁵⁷⁹

On 10 April 2019, the European Supervisory Authorities (ESAs) published a Joint Advice on the costs and benefits of a coherent cyber resilience testing framework for significant market participants and infrastructures within the EU financial sector.³⁵⁸⁰ The ESAs saw clear benefits of such a framework. However, at present there were determined to be significant differences across and within financial sectors as regards the maturity level of cybersecurity. In the short-term, the ESAs advised to focus on achieving a minimum level of cyber-resilience across the sectors, proportionate to the needs and characteristics of the relevant entities.³⁵⁸¹ Furthermore, the ESAs proposed to establish on a voluntary basis an EU wide coherent testing framework together with other relevant authorities taking into account existing initiatives, and with a focus on Threat Lead Penetration Testing. In the long-term, the ESAs aimed to ensure a sufficient cyber maturity level of identified cross-sector entities.³⁵⁸²

On 7 February 2019, a workshop on Blockchain and Distributed Ledger Technologies (DLT) was held in Brussels Belgium. Experts and representatives from Social Economy, EU institutions, companies participated in this workshop, organized in the context of the EU Industry Days 2019.³⁵⁸³ The workshop presented solutions based on Blockchain or DLTs for social goals. The aim was not only to develop scalable, efficient and high-impact decentralized solutions to social innovation challenges but also to bring social economy enterprises and related stakeholders closer to blockchain technology as possible tools for their developments. The Workshop promoted awareness of the development of legal validity and enforceability of applications of distributed ledger technology.³⁵⁸⁴

³⁵⁷⁷ Cybersecurity Standardization, European Union Agency for Network and Information Security (Heraklion) 21 January 2019. Access date: 15 February 2019. https://www.enisa.europa.eu/events/cybersecurity_standardisation/.

³⁵⁷⁸ Cybersecurity Standardization, European Union Agency for Network and Information Security (Heraklion) 21 January 2019. Access date: 15 February 2019. https://www.enisa.europa.eu/events/cybersecurity_standardisation/.

³⁵⁷⁹ Cybersecurity Standardization, European Union Agency for Network and Information Security (Heraklion) 21 January 2019. Access date: 15 February 2019. https://www.enisa.europa.eu/events/cybersecurity_standardisation/.

³⁵⁸⁰ ESAs Publish Joint Advice on Information and Communication Technology Risk Management and Cybersecurity, European Banking Authority (London) 10 April 2019. Access date: 29 April 2019. <https://eba.europa.eu/-/esas-publish-joint-advice-on-information-and-communication-technology-risk-management-and-cybersecurity>.

³⁵⁸¹ ESAs Publish Joint Advice on Information and Communication Technology Risk Management and Cybersecurity, European Banking Authority (London) 10 April 2019. Access date: 29 April 2019. <https://eba.europa.eu/-/esas-publish-joint-advice-on-information-and-communication-technology-risk-management-and-cybersecurity>.

³⁵⁸² ESAs Publish Joint Advice on Information and Communication Technology Risk Management and Cybersecurity, European Banking Authority (London) 10 April 2019. Access date: 29 April 2019. <https://eba.europa.eu/-/esas-publish-joint-advice-on-information-and-communication-technology-risk-management-and-cybersecurity>.

³⁵⁸³ Workshop on Blockchain, Digital Social Innovation and Social Economy, European Commission (Brussels) 7 February 2019. Access date: 15 February 2019. <https://ec.europa.eu/digital-single-market/en/news/workshop-blockchain-digital-social-innovation-and-social-economy>.

³⁵⁸⁴ Workshop on Blockchain, Digital Social Innovation and Social Economy, European Commission (Brussels) 7 February 2019. Access date: 15 February 2019. <https://ec.europa.eu/digital-single-market/en/news/workshop-blockchain-digital-social-innovation-and-social-economy>.

On 2 April 2019, the European Union announced that it was launching a call for proposals on co-creating a European Ecosystem of DLTs for Social and Public Good. This was a new project in the Blockchain space of the EU Policy Lab. It was supported by the European Parliament, and would run in cooperation with The Next Generation Internet Unit of Directorate General for Communications Networks, Content & Technology (DG CNECT).³⁵⁸⁵

On 22 January 2019, negotiators from the European Parliament, the Council of the EU and the Commission reached an agreement on the revised Directive 2003/98/EC on the re-use of public sector information.³⁵⁸⁶ This would allow the governments of Member States as long as other stakeholders to obtain data more freely. Once adopted, the newly named Open Data and Public Sector Information Directive would:

- Identify, by way of adoption of an implementing act, a list of high-value datasets such as geospatial or statistics data to be provided free of charge.
- Stimulate the publishing of dynamic data and the uptake of Application Programme Interfaces (APIs).
- Limit the exceptions which currently allow public bodies to charge more than the marginal costs of dissemination for the re-use of their data.
- Enlarge the scope of the Directive to: data held by public undertakings, under a specific set of rules; research data resulting from public funding.³⁵⁸⁷

On 10 April 2019, the ESAs published a Joint Advice on the need for legislative improvements relating to ICT risk management requirements in the EU financial sector.³⁵⁸⁸ The ESAs' objective was that every relevant entity should be subject to clear general requirements on governance of ICT, including cybersecurity, to ensure the safe provision of regulated financial services. Guided by this objective, the proposals presented in the Advice aimed at promoting stronger operational resilience and harmonisation in the EU financial sector by applying changes to their respective sectoral legislation.³⁵⁸⁹ Incident reporting was said to be highly relevant to ICT risk management and allow relevant entities and authorities to log, monitor, analyse and respond to ICT operational, ICT security and fraud incidents.³⁵⁹⁰

On 3 April 2019, the European Commission Directorate General CNECT organised the sixth Working Group meeting of Digital Innovation Hubs (DIHs) on digital tools, platforms and marketplaces, with the aim to explore how the solutions developed by DIH-related European

³⁵⁸⁵ Blockchain4EU, European Commission EU Policy Lab (Brussels) 2 April 2019. Access date: 29 April 2019. <https://blogs.ec.europa.eu/eupolicylab/tag/blockchain4eu/>.

³⁵⁸⁶ Building a European data economy, European Commission (Brussels) 22 January 2019. Access date: 16 February 2019. <https://ec.europa.eu/digital-single-market/en/policies/building-european-data-economy>.

³⁵⁸⁷ Building a European data economy, European Commission (Brussels) 22 January 2019. Access date: 16 February 2019. <https://ec.europa.eu/digital-single-market/en/policies/building-european-data-economy>.

³⁵⁸⁸ ESAs Publish Joint Advice on Information and Communication Technology Risk Management and Cybersecurity, European Banking Authority (London) 10 April 2019. Access date: 29 April 2019. <https://eba.europa.eu/-/esas-publish-joint-advice-on-information-and-communication-technology-risk-management-and-cybersecurity>.

³⁵⁸⁹ ESAs Publish Joint Advice on Information and Communication Technology Risk Management and Cybersecurity, European Banking Authority (London) 10 April 2019. Access date: 29 April 2019. <https://eba.europa.eu/-/esas-publish-joint-advice-on-information-and-communication-technology-risk-management-and-cybersecurity>.

³⁵⁹⁰ ESAs Publish Joint Advice on Information and Communication Technology Risk Management and Cybersecurity, European Banking Authority (London) 10 April 2019. Access date: 29 April 2019. <https://eba.europa.eu/-/esas-publish-joint-advice-on-information-and-communication-technology-risk-management-and-cybersecurity>.

projects could be re-used by other SMEs and what role regions and DIHs could take in this.³⁵⁹¹ The event welcomed projects that have developed relevant platforms or marketplaces, regions that could re-use these tools for SMEs in their own territories as well as Digital Innovation Hubs themselves to see what additional solutions they may be able to add to their service offerings.³⁵⁹²

On 29 April 2019, the European Union held a conference “Regulatory Sandboxes for Effective Financial Inclusion.”³⁵⁹³ The EU acknowledged that digitalisation presented enormous opportunities for financial inclusion of the 1.7 billion financial excluded adults around the world and that public policy and regulatory environment provided the foundation for such opportunities to materialise at the required scale. The African continent was determined by the EU to be in the centre of this conversation.³⁵⁹⁴ For digital disruption and opportunities to work for the poor, many policy and regulatory challenges needed to be addressed. The EU recognized the emergence of regulatory “sandboxes” as a powerful tool that allowed public and private sector to jointly test approaches and solutions and optimise policy making and regulatory frameworks.³⁵⁹⁵

The European Union has taken measures related to FinTech in line with seven action areas identified by the Financial Stability Board. Thus, it has been awarded a score of +1.

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³⁵⁹¹ 6th Digital Innovation Hubs Workshop on Digital Tools and Marketplaces, European Commission (Brussels) 3 April 2019. Access date: 29 April 2019. <http://s3platform.jrc.ec.europa.eu/-/digital-innovation-hubs-workshop-on-digital-tools-and-marketplaces?inheritRedirect=true>.

³⁵⁹² 6th Digital Innovation Hubs Workshop on Digital Tools and Marketplaces, European Commission (Brussels) 3 April 2019. Access date: 29 April 2019. <http://s3platform.jrc.ec.europa.eu/-/digital-innovation-hubs-workshop-on-digital-tools-and-marketplaces?inheritRedirect=true>.

³⁵⁹³ Regulatory Sandboxes for Effective Financial Inclusion, European Commission (Brussels) 29 April 2019. Access date: 29 April 2019. https://ec.europa.eu/europeaid/news-and-events/regulatory-sandboxes-effective-financial-inclusion_en.

³⁵⁹⁴ Regulatory Sandboxes for Effective Financial Inclusion, European Commission (Brussels) 29 April 2019. Access date: 29 April 2019. https://ec.europa.eu/europeaid/news-and-events/regulatory-sandboxes-effective-financial-inclusion_en.

³⁵⁹⁵ Regulatory Sandboxes for Effective Financial Inclusion, European Commission (Brussels) 29 April 2019. Access date: 29 April 2019. https://ec.europa.eu/europeaid/news-and-events/regulatory-sandboxes-effective-financial-inclusion_en.