

# 5G for FinTech

## International experiences

ITU Workshop on Economics, Finance and Business models  
for 5G and new Technologies for Digital Africa

13 September 2019

Lomé, TOGO



# 5G and Industry 4.0 in Africa

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Shift from voice to data services

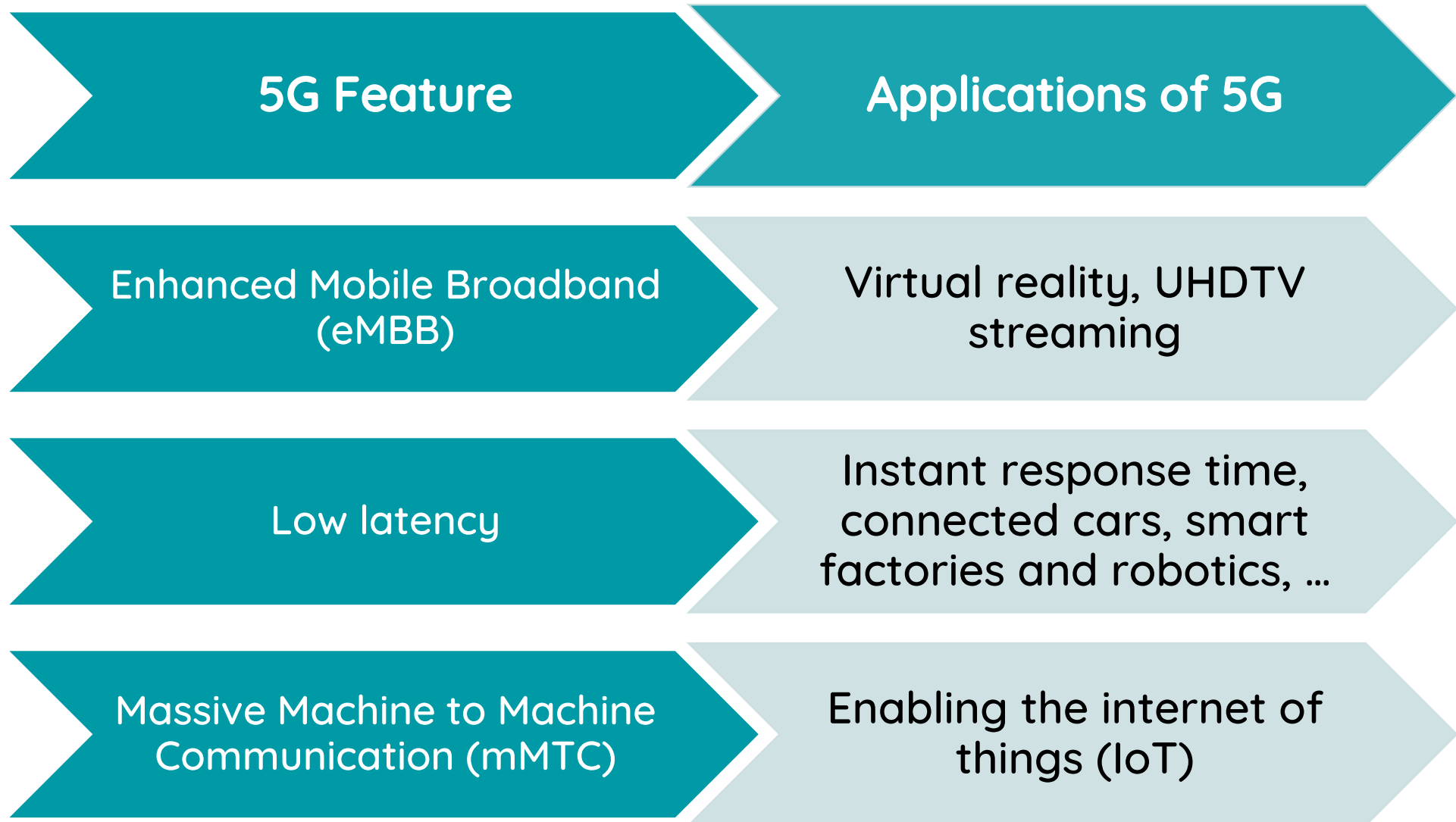
5G to enable the Fourth Industrial  
Revolution

Emergence of innovative life-  
enhancing business models

Growing interest from international  
tech players



# Examples of 5G potential applications



# 5G and FinTech

## Relevance and definition

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The financial sector is one of the largest users of digital technologies

Growing usage of mobile technologies for payments and to interact with banks

**FinTech** is a term used to describe technology-enabled innovation in financial services that could result in new business models, applications, processes or products and could have a material effect on financial markets and institutions and how financial services are provided.



# FinTech ecosystem

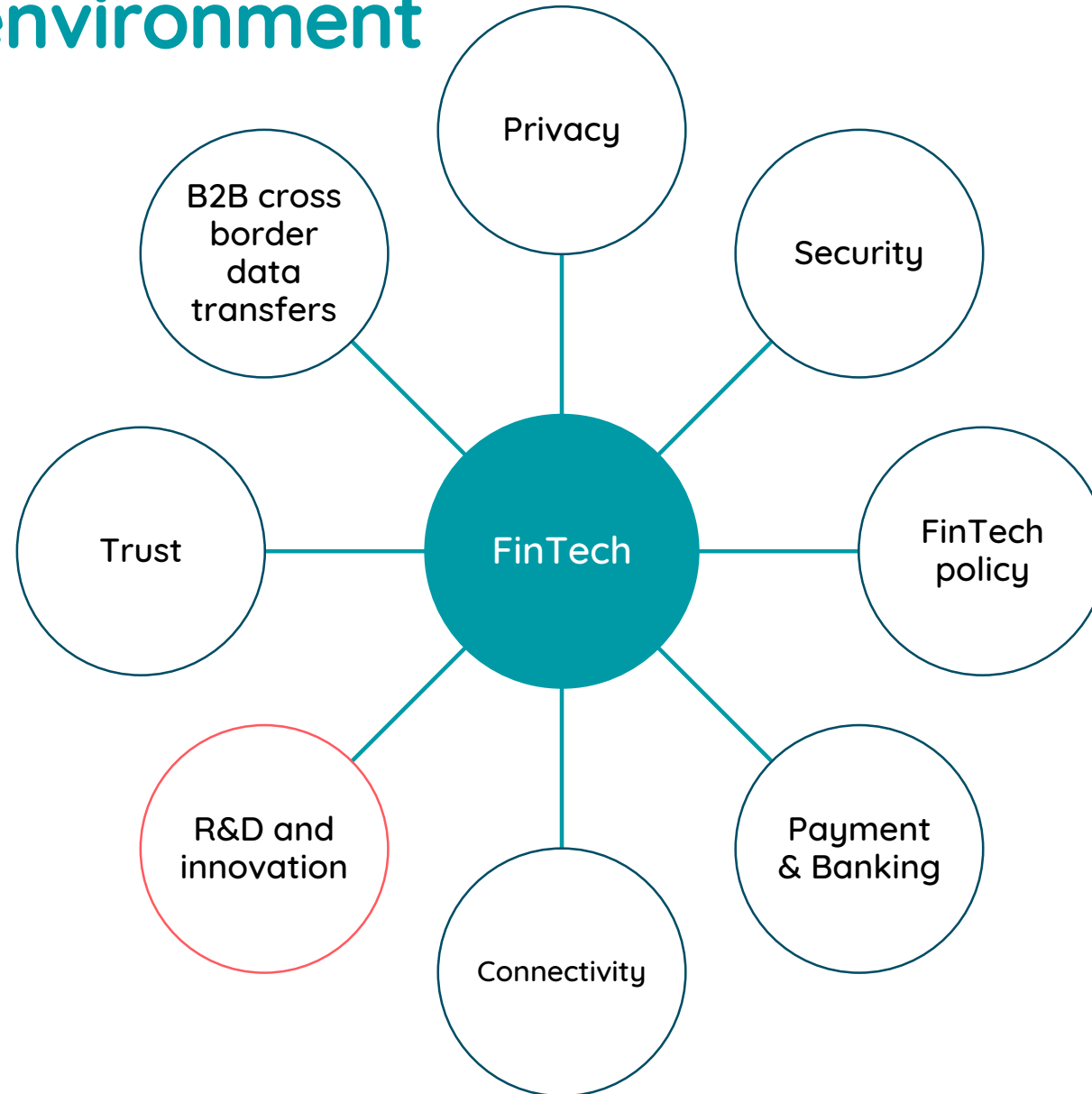
<p><b>ROBO ADVISORS &amp; PERSONAL FINANCE</b></p>	<p><b>REGTECHS</b></p>	<p><b>DIGITAL BANKS &amp; BANKING SOFTWARE PROVIDERS</b></p>	<p><b>PAYMENTS &amp; REMITTANCES</b></p>
<p><b>BLOCKCHAIN/DLT &amp; BITCOIN</b></p>	<p><b>INSURTECHS</b></p>	<p><b>ALTERNATIVE FINANCE</b></p>	
<p><b>DIGITAL IDENTITY VERIFICATION</b></p>			

Source: [Business Insider](https://www.businessinsider.com/fin-tech-companies)

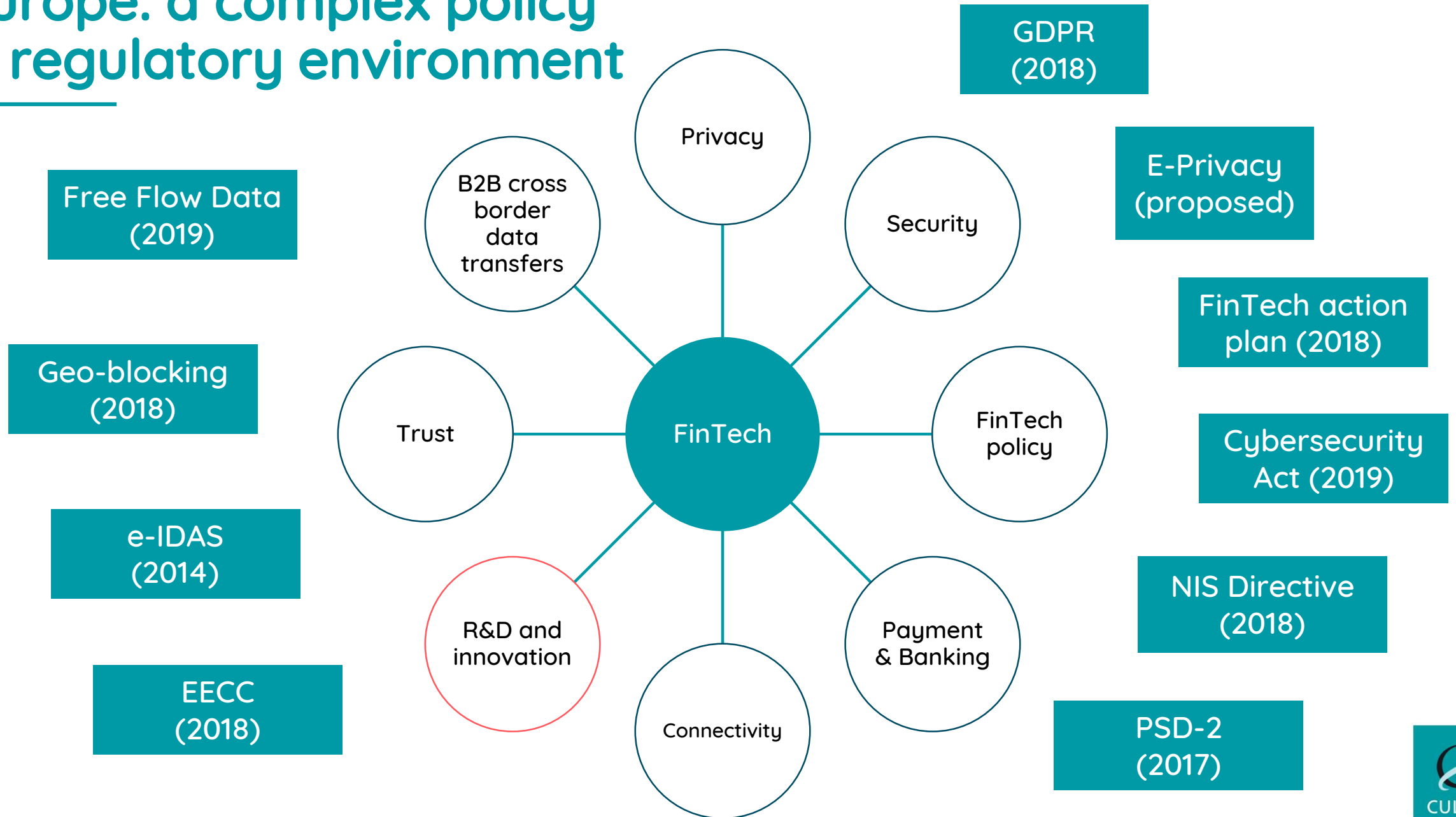


# Europe: a complex policy & regulatory environment

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# Europe: a complex policy & regulatory environment



# Americas: Online payment regulatory environment

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All countries adopted specific rules for e-payments systems to foster e-commerce & financial inclusion

Colombia and Argentina issued specific rules for mobile payments

For most authorities, Bitcoin is not a legal currency

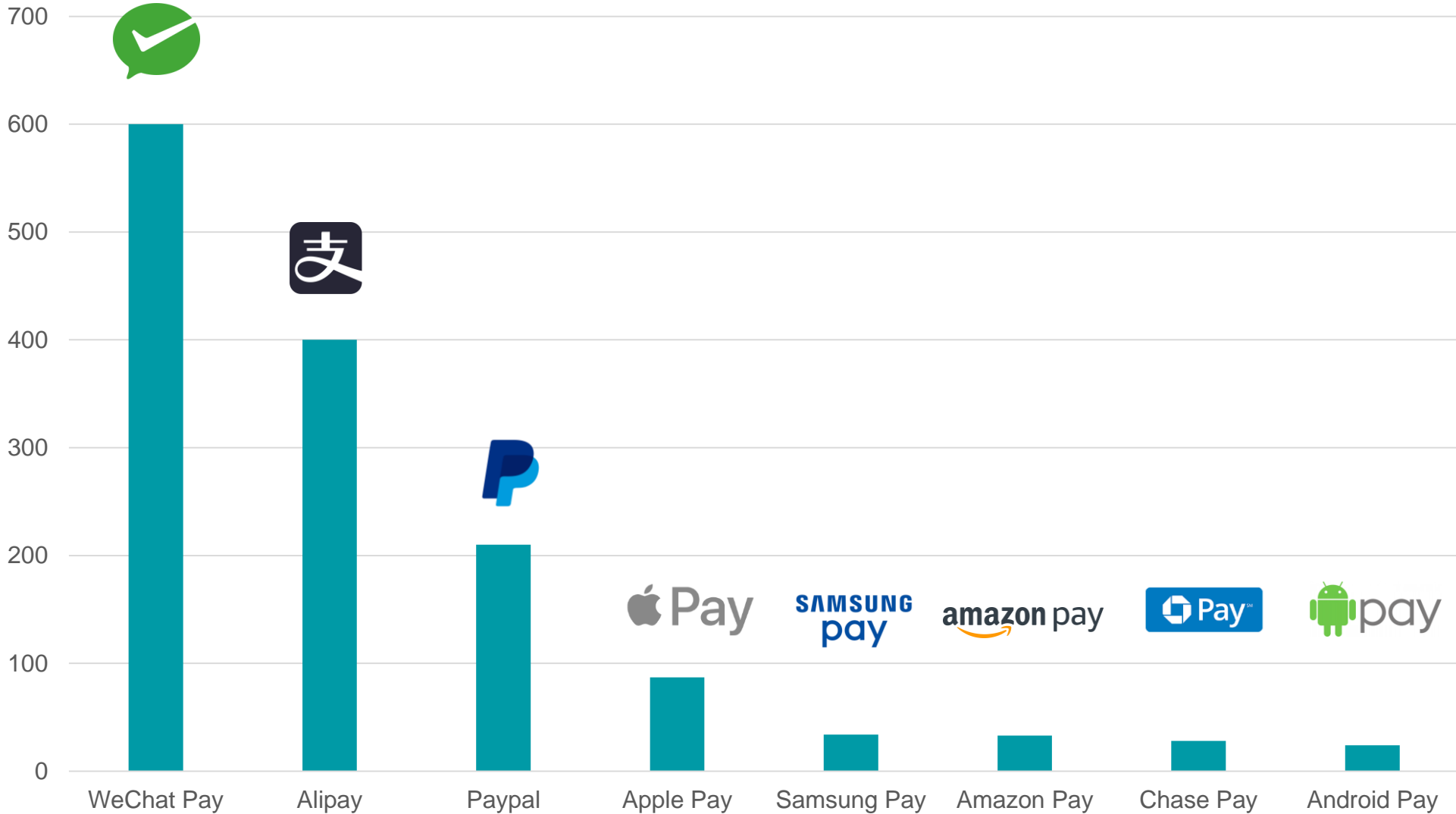
**Argentinian government tax reform (2017)** : virtual money earnings are now subject to taxation

**Mexican Fintech Law (2018)** regulates:

- The use of new technologies for the provision of financial services;
- The creation of a regulatory sandbox
- The use by financial institutions, under conditions, of ‘virtual currencies’



# Key figures : Number of users of leading mobile payment platforms worldwide as of August 2017 (number in millions)

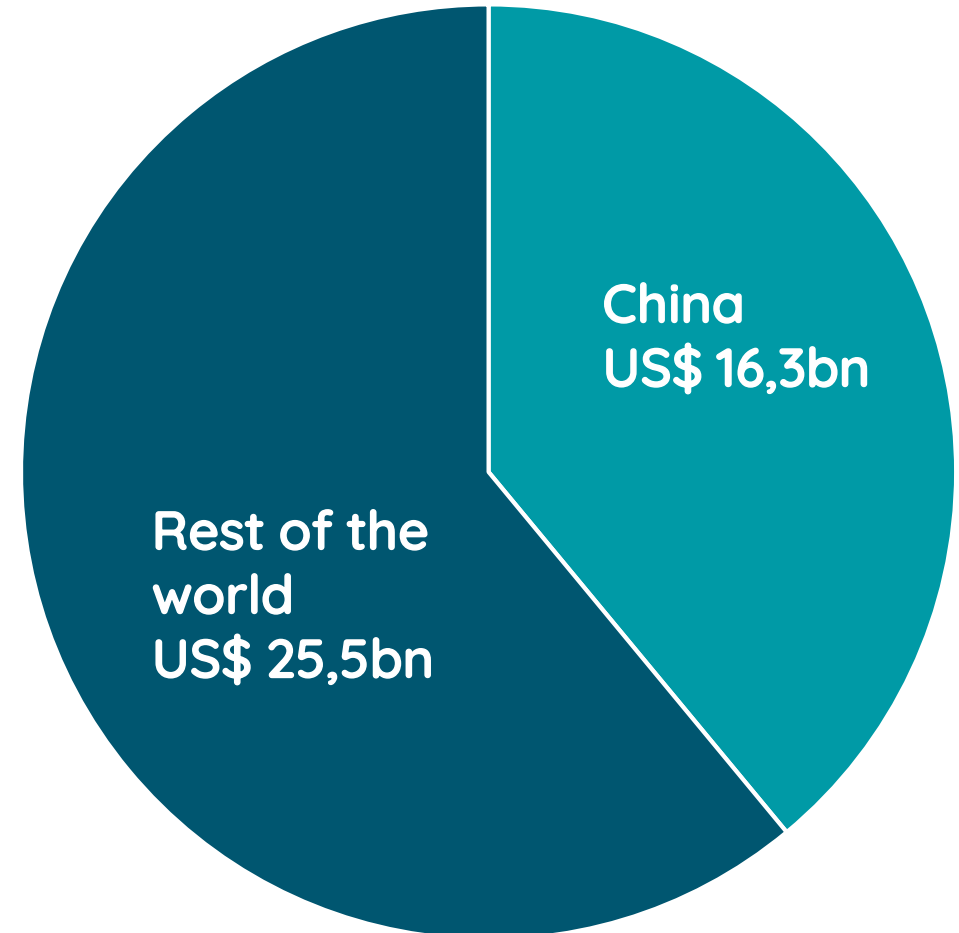
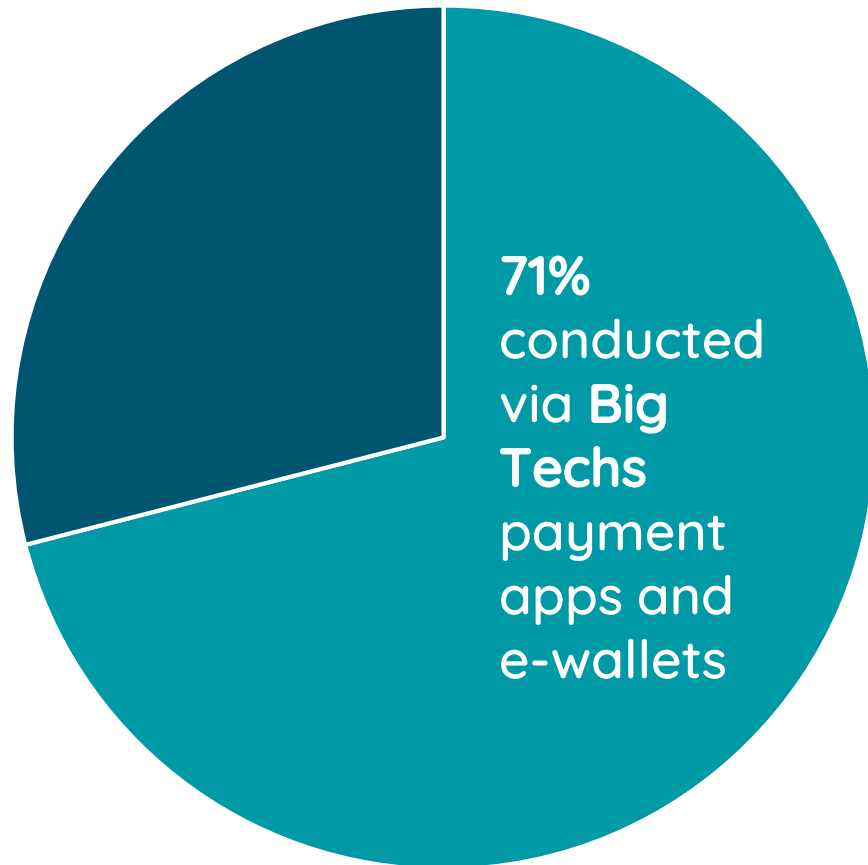


Source: [Statista 2019](#)

# Key figures : transactions conducted via e-wallets

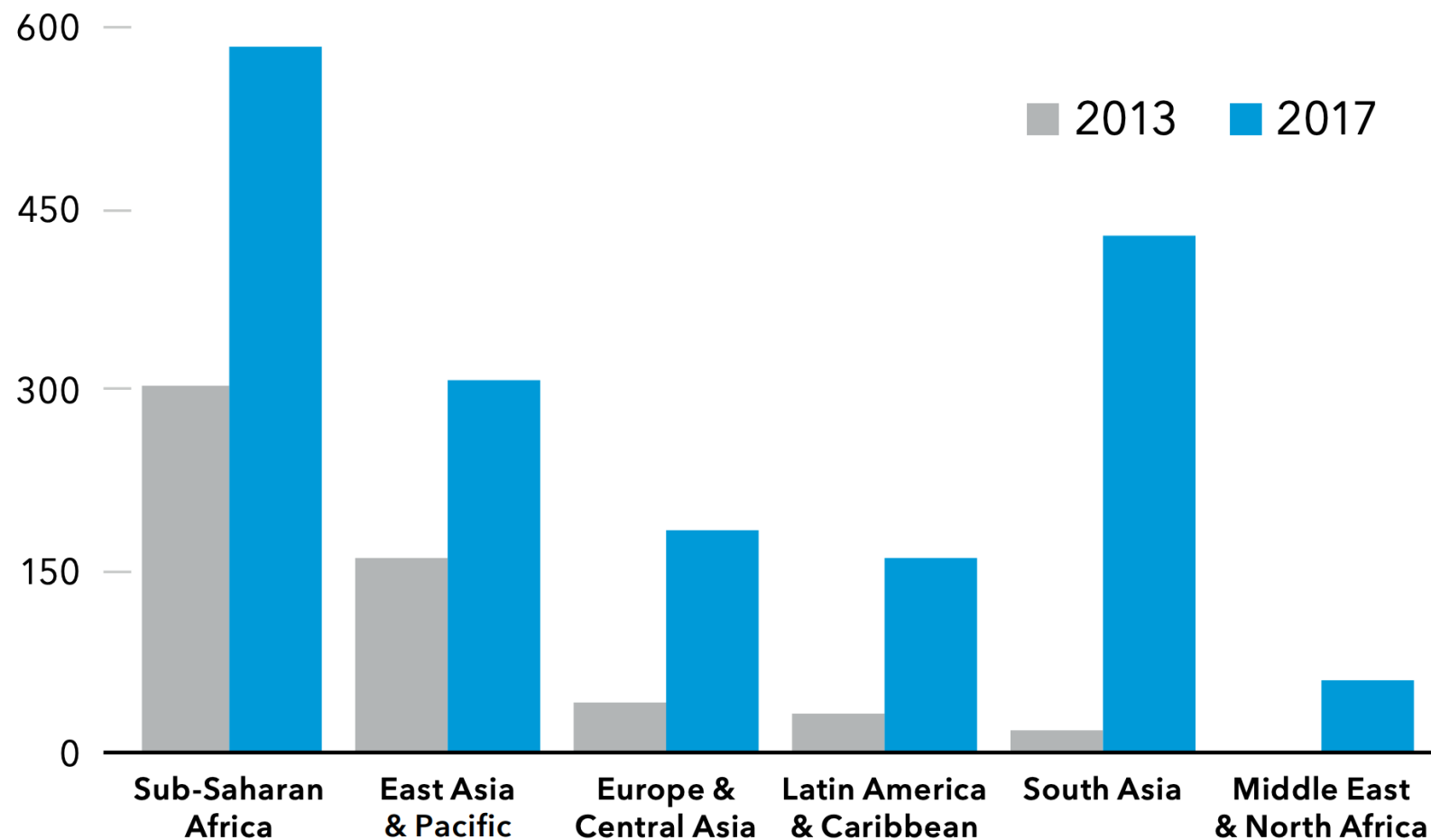
Non-cash transactions via e-wallets estimated to US\$41.8bn in 2016

Regional figures of non-cash transactions in US\$ bn via e-wallets in 2016



Source: [World Payments Report](#)

# Key figures : Registered mobile money accounts by regions (Number per 1,000 adults)



Source: [Mobile money note 2019, International Monetary Fund](#)

# Potential impacts of 5G technologies on FinTech

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Automated bank branches and improved access in underbanked regions

Enhanced security and fraud prevention

Enable wearable, VR and AR banking

Increase mobile money and e-wallet adoption

# Innovation facilitators : FinTech regulatory sandboxes

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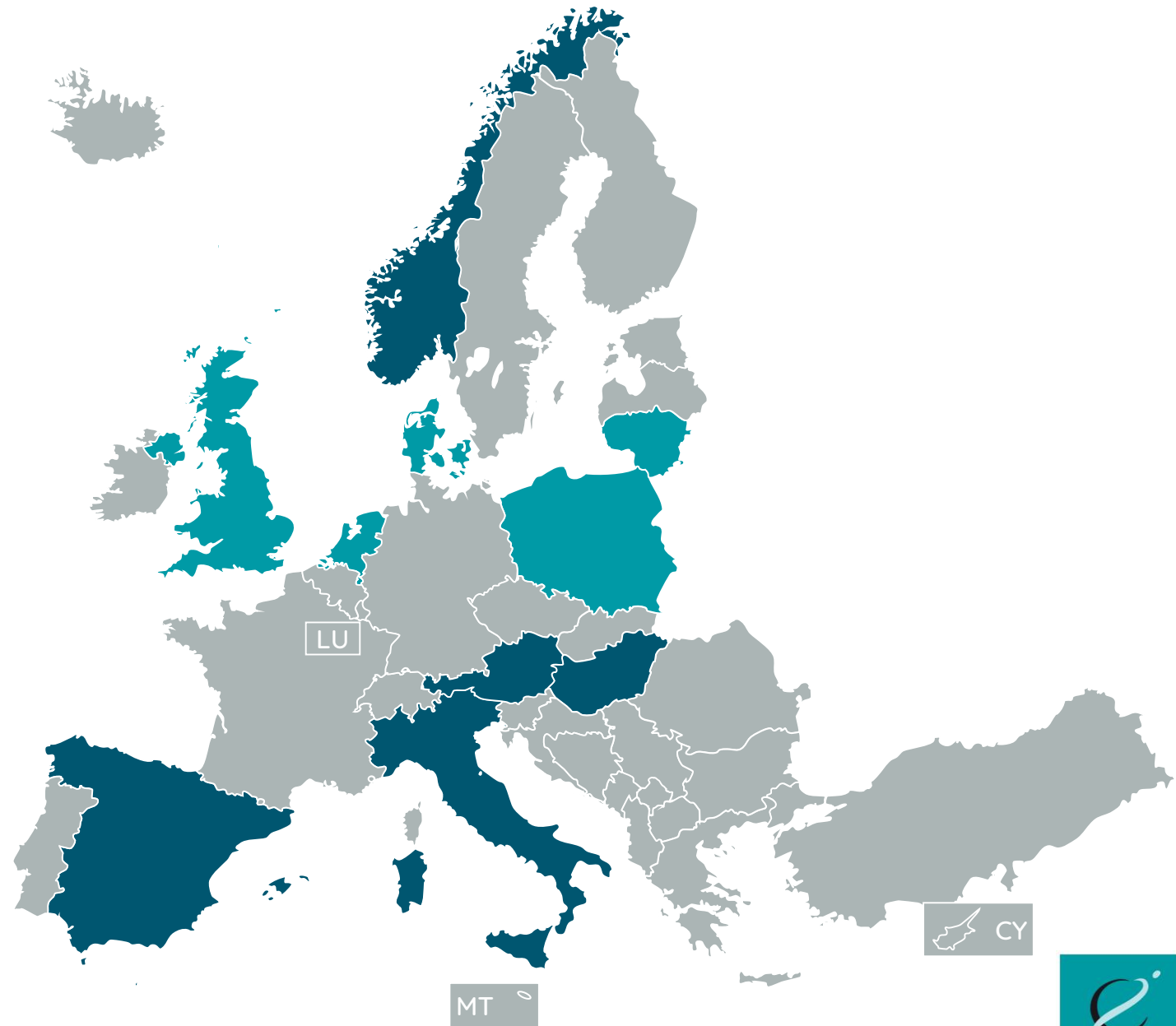
**Regulatory sandboxes** provide a scheme set up by a competent authority that provides entities with the opportunity to test innovative products or services or business models, related to the carrying out of financial services.



Source: ESMA

# FinTech regulatory sandboxes in Europe

- 5 FinTech regulatory sandboxes established in Europe
- Preparations underway in 5 other European countries



# FinTech regulatory sandboxes in Europe

## Common features:

- cross-sectoral (e.g. banking, investment activities and services, and insurance)
- open to incumbent institutions, new entrants, and other firms such as technology provider
- not limited to the testing of regulated financial services
- they do not allow, even in the testing phase, the carrying out of regulated financial services without a licence.

# FinTech regulatory sandboxes in Europe

## Opportunities

- Competent authorities can better follow emerging technologies developments and applications in the financial sector
- Firms understand better regulatory and supervisory expectations

## Risks

- Propositions under test may be perceived by consumers/market as 'endorsed' by competent authorities
- Limits of FinTech regulatory sandboxes in Europe
- No cross-border coordination and cooperation



# Efforts for Innovation in Korea

## I-KOREA 4.0 major accomplishments

INFRA-  
STRUCTURE



DNA



Source: MSIT Rep. of Korea

# Efforts for Innovation in Korea

## Special Act on Financial Innovation Support

Companies selected by the Financial Services Commission (FSC) are exempt from current financial regulations for up to two years.

Consumer protection and risk management plans to be approved by FSC before the testing phase.

As of July 25, 42 services are approved to be tested in the financial regulatory sandbox.

# Key takeaways

The financial sector is one of the largest users of digital technologies

5G potential to create new business models in the financial sector

Regulatory sandboxes as a tool to enable solutions combining 5G and FinTech

In Europe, regulatory sandboxes have a more conservative application



Thank you!

[ioana.voicu@cullen-international.com](mailto:ioana.voicu@cullen-international.com)