Reflecting on the EBA’s work to-date, and looking towards the new Digital Finance Strategy, I would like to focus today on the progress we have made towards removing obstacles to the application of innovative technologies in the banking and payments sectors, namely by working to achieve technological neutrality in our regulatory and supervisory approaches and our strategy going forward.

Technological neutrality demands that we should not inadvertently prefer or prevent the adoption of a specific technology nor prefer or prejudice a specific business model or service provider, whilst still continuing to ensure that our regulatory objectives, such as consumer protection, prudential robustness and financial stability, continue to be met.

This sounds rather straightforward – indeed, it is really an expression of the correct application of our traditional risk-based approach to regulation and supervision.

But delivering technological neutrality in practice is no easy task.

We are seeing a rapid adoption of innovative technologies within the financial sector, resulting in new products, services and business models, which are starting to impact the structure and interconnectedness of the financial sector.

Additionally, and I say this sitting with my colleagues from the other European Supervisory Authorities (ESAs), these new technologies are inherently cross-sectoral. For example, we see:
- AI solutions in the context of credit scoring and insurance underwriting and pricing;
- the use of digital tokens and Blockchain in the context of trade finance, cross-border payments, securities settlement and green bond issuance;
- automated and machine learning solutions for data input, aggregation and analysis to improve regulatory reporting and suspicious transactions monitoring; and
- digital platforms providing new means to unbundle and re-bundle services and to reach consumers, including cross-border.

The applications of new technologies are also challenging our traditional approach of industry-based regulation.

Which means that we have the challenge of securing not only cross-jurisdictional but also cross-sectoral consistency in our regulatory and supervisory response.

And these factors point us towards greater coordination, knowledge-sharing and collaboration in our work as we seek to adopt a forward-looking response taking account of prudential, financial stability, conduct of business, AML/CFT, data protection and potential competition considerations.

Focusing on the EBA’s work, we have been taking steps in regulation, supervisory practices, processes and culture.

As you will recall, in 2018 following the publication of the Commission’s FinTech Action Plan we published the EBA’s FinTech Roadmap where we set out a series of priorities relating to, among other things, authorisation and licencing approaches to FinTech firms, the impact of FinTech on the business models of banks, payment institutions and e-money institutions, and targeted work relating to artificial intelligence (AI), Big Data and machine learning, crypto-assets and cloud services.

The EBA recently completed the deliverables under the Action Plan and the Roadmap and I will take a moment to reflect on the lessons learned.

**Tech readiness – regulation**

Firstly we have identified clear cases where existing regulation – or the absence of regulation – results in outcomes that are not technologically neutral. For example, the status quo may be unintentionally impeding the roll out of new technology; hindering the scaling of activities across the Single Market to the benefits of consumers; or posing a barrier to new entrants.

Notably, we have identified that significant divergences in conduct of business requirements, cyber security and other aspects of operational resilience, and approaches to remote customer
onboarding are posing a barrier to the scaling up of activities cross-border as firms struggle to navigate a patchwork of domestic requirements.

These need to be tackled if we are to meaningfully improve the functioning of the Single Market for financial services.

Secondly, divergences between Member States in terms of the acceptability and regulation of the use of specific technologies is impacting firms’ capacity to integrate technological solutions into their businesses and across group structures.

We have made some progress in addressing this problem. For instance, the EBA’s Guidelines on outsourcing, including to cloud service providers, have promoted consistency in the management and oversight of this form of operational risk, facilitating the use of this type of service.

As a further measure to enhance operational resilience, we have recently published our Guidelines on information and communication technology (ICT) and security risk management, aiming to strengthen the management of ICT and security risks in the EU banking and payments sectors.

Thirdly, we have identified areas where additional regulation is needed.

For instance, we have advised the European Commission to look at the establishment of an appropriate oversight framework for third party service providers (TPPs), for example in the area of cloud services. We see a need to strengthen and harmonise the current legislative framework for TPPs in two ways: micro and macro.

At the micro level, we need to strengthen the toolkit to enable supervisors to supervise more effectively the activities, which are provided by third parties. Such strengthening should enable to have access rights, audit right and sanctioning rights directly from the regulatory framework rather than relying only on contractual provisions in outsourcing contracts.

At the macro level, for critical TPPs, we need a new oversight framework that sets higher standards related to security and data protection (e.g. obligatory cyber security certification). The scope of oversight should aim at monitoring concentration risk, financial stability risks, and ensuring cooperation with relevant authorities.

Another area where additional regulation is needed is crypto-assets, where we have identified in our advice to the European Commission both uncovered risks and also a lost opportunity stemming from gaps or areas of ambiguity in the current EU framework. We hope this will be addressed in the Commission’s forthcoming legislative initiative.

But there are many other areas such as Big Data and Advanced Analytics in which we also have a long way to go.

Our recent report on Big Data and Advanced Analytics, identifies data management by financial institutions as one of the key pillars for the development, implementation and adoption of advanced analytics (including AI). This pillar should be supported by high governance standards and
additional ‘trust elements’ if new technologies around AI and machine learning are to be used. Some of these ‘trust elements’ should help answer concerns on: ethics, fairness and the avoidance of bias; the explainability and interpretability of the outcomes; and security.

We will be working hard this year to promote these elements, including at international level.

Looking beyond the specific case of AI, as set out in the European Commission’s new data strategy, the way we organise data access and reuse data is crucial in determining the EU’s innovation capacity. Our experiences from the implementation of the PSD2, show that measures to facilitate access to payment accounts data, has supported innovation and boosted competition in the European payments sector. But we know others are already looking beyond PSD2 into ‘open finance’ and, in that context, also harnessing the progress of the GDPR to consider how access to both personal and non-personal data may be regulated to ensure world-leading standards with the objective of further empowering “data subjects”, or “people” as I prefer to call them, in determining how their data can be used across sectors.

**Tech readiness – supervisory culture**

But we have also learnt that delivering on proper technological implementation is as much about supervisory culture as it is about regulation.

Our FinTech work to-date has identified that supervisors adopt different policies or stances that show an inadvertent bias towards the status quo, quite often stemming from a lack of familiarity with newer technologies and the opportunities and risks involved.

Differing approaches, and sometimes just a lack of knowledge, can pose a very significant barrier for the scaling up of new technologies across the European Union. For instance, taking the case of a banking group with a presence in multiple jurisdictions, they may receive different answers when asking each local supervisor whether blockchain could be piloted for intra-group transactions.

Promoting a more common approach is a key priority for us. This is why we established the EBA’s ‘FinTech Knowledge Hub’ and have been doubling our efforts to gather the latest trends in technology developments and supervision and share them widely to enable supervisors to ask the right questions in a constructive way. We have done so, for example, with our reports on outsourcing to the cloud, the use of technology in customer due diligence and our report on Big Data and Advanced Analytics.

Additionally, the European Forum for Innovation Facilitators (EFIF) has been established on a joint basis by the ESAs to enable supervisors to share experiences, technological expertise, and their reactions to the latest technology and innovations. The EFIF also enables supervisors to leverage knowledge gained from innovation facilitator initiatives, to discuss specific technology applications and use cases. This closer engagement enables us to fine-tune our regulatory and supervisory
expectations at a pace that is in close alignment with market developments, thereby supporting the scaling up of innovation across the EU financial sector.

What can you expect from us in the year ahead?

So what can you expect from the EBA in 2020 in this area?

FinTech remains a strategic priority for the EBA. In addition to the continuation of our work on issues such as crypto-assets, AI, Big Data and machine learning, and wider innovation monitoring, we will be focussing our attention in three areas: RegTech and SupTech, platformisation and operational resilience.

Specifically, we will be taking forward work to assess how banking regulators and supervisors can leverage technology in our own processes. In particular, we will be stepping up our monitoring of RegTech solutions in the market to analyse how new technologies could be used by market participants to address regulatory and compliance requirements more effectively and efficiently, to identify any potential obstacles for the use of RegTech and to propose possible solutions/recommendations if needed.

In case of SupTech, we will also be working to enhance the sharing of use cases between competent authorities across the EU to facilitate a common approach to the utilisation of technologies, for instance in the context of suspicious transactions monitoring and regulatory reporting.

We will also be undertaking a major new thematic piece focussing on some of the structural changes we are starting to observe in the financial sector – specifically the trend towards the reaggregation of products and services on platforms, and emerging new forms of interconnection in the financial sector.

In the area of operational resilience, the EBA will support the consistent implementation of the Guidelines on ICT risk and security management addressed to financial institutions by organising training/workshop events in 2020.

As I said before, we also expect further work as a follow up on the advice provided to the European Commission on ICT related legislative improvements (e.g. framework for oversight of TPP), coherent cyber resilience testing framework, regulatory impediments to innovation, and crypto-assets. The EBA is also contributing to wider international efforts in this area.

We also expect additional new mandates under the European Commission’s upcoming Digital Finance Strategy.
Conclusion

I will close by noting that by leveraging on our common expertise and resources with the other regulatory authorities and working together, we can achieve an EU regulatory and supervisory framework that is able to accommodate the benefits of innovation while properly monitoring and limiting the potential concerns on financial stability, consumer protection and privacy, and ensuring proper risk management. In summary, a framework that remains technologically neutral and maintains that stance against fast-paced innovation in the market. We look forward to the next phase of this work as the EU continues to set the regulatory benchmark at the international level.