ROADMAP

for the German digital financial market in 2030, prepared by the Digital Finance Forum at the German Federal Ministry of Finance



The Digital Finance Forum at the Federal Ministry of Finance was launched in March 2022 by Finance Minister Christian Lindner and Parliamentary State Secretary Florian Toncar. The forum serves as a communication platform where policy-makers and representatives from the digital finance sector share views and expertise. In various working groups, the roughly 40 experts who make up the Digital Finance Forum are pursuing a mission to strengthen Germany's position as a European financial centre. They have identified key issues and priorities that have now been consolidated into a roadmap for the future. This roadmap aims to help establish Germany as a leading hub for fintech and innovation in Europe.1





¹ Further information on the Digital Finance Forum is available (in German only) at https://www.bundesfinanzministerium.de/Web/DE/Themen/Internationales_Finanzmarkt/ Digital-Finance-Forum/digital-finance-forum.html

I. WHAT IS THE CURRENT STATE OF PLAY AND WHAT IS OUR MISSION?

Over the past decade, the supply of and demand for digital services has surged dramatically, not just in the areas of communication and e-commerce, but also in the banking, payments, investment and insurance sectors. Mobile devices and digital information and communication services have fundamentally changed consumer behaviour and expectations. Platform-based providers make data and information accessible and usable – anywhere, at any time. Many of the services that people use in their day-to-day lives are dominated by non-European big tech companies. Artificial intelligence and intelligent recognition are increasingly being used for more than just simple, repetitive tasks. The importance of distributed ledger technology and the token economy is also growing steadily.

In this digital and data economy, we are seeing more and more closed digital ecosystems in which networks of companies have bundled their services. Key technological developments are being driven by US and Chinese companies. In Europe, the landscape is dominated by the US companies Amazon, Apple, Google, Meta, Microsoft and PayPal as well as Chinese-owned TikTok. These big tech companies primarily appeal to younger consumer groups. They are increasingly offering classic financial services, but they also operate in other areas that are of key importance to the financial sector, such as digital identity solutions. The importance of digital ecosystems is only set to increase. At present, there are only a few German or European players with the size and (tech) capabilities to become ecosystems with comprehensive offerings like those that have emerged in other markets, especially in the area of payment solutions.

Modern solutions and services are developed on the basis of data, and this will become even more true in the future. The next generation of financial and market infrastructure solutions will use data-processing cloud applications not only for data administration, but as a substitute for current network solutions in the financial industry. At present, there is a lack of legal and operational certainty for the use of international hyperscalers in Germany. This brings significant competitive disadvantages: Legal certainty for cloud solutions is absolutely essential for the business operations, scalability and security of new and established financial market participants. A good balance between data protection and market realities is equally important.

New technologies such as blockchain and distributed ledger technology have evolved rapidly over the past decade. Technology as the basis of the token economy has undergone huge changes, and its limitations and risks have become more apparent. The blockchain is the first potential global infrastructure for all kinds of transactions, and also enables financial services to be fully automated (decentralised finance). This will create fundamentally new ways of connecting and harmonising markets. Regulating these decentralised financial services will be a challenge, because they do not work in the same way as conventional financial services and

therefore require different rules. Germany must continue to create attractive conditions for innovations in this area to ensure that it is in a good position to face future challenges. Rather than trying to recreate an old world with new technologies, we need to take a fundamentally new approach to regulation.

Positive regulatory developments include the adoption of the Electronic Securities Act (Gesetz über elektronische Wertpapiere) in June 2021, which successfully adapted the legal framework to blockchain technology in particular. Some cryptosecurities have already been issued, and the market will continue to grow. However, there is an urgent need for a secure, regulated, tokenised payment option, alongside the European Central Bank's plans for a euro central bank digital currency (CBDC). The market volume of stablecoins is growing rapidly, due to the advantages they offer for cross-border payments and their programmability for industry use cases. With a market share of less than one percent, the role of the euro as a reference currency is negligible compared with the US dollar.

Digital identity solutions are essential for a strong digital economy and for all digital financial services. Issuing identity documents is and should remain a fundamentally sovereign task. In its current form, however, the digital ID card does not reflect the importance of digital identity solutions for industrial and social policy. It does not offer sufficient benefits or potential use cases. At the European level, too, practical solutions cannot be expected until the second half of the decade, at the earliest.

In all the areas mentioned above, innovation and digital policies in Germany need to be improved in terms of their digital competitiveness.² Digitalisation and the scalability that comes with it open up the market to new competitors and new business models. Digital infrastructure is a prerequisite and a competitive factor for Germany's position as a centre of business and industry in Europe. At present, the pace of technological development is being slowed by fragmented legislation, rigid – and in some cases outdated – regulation and implementation, and goldplating in regulation and supervision. When it comes to innovation, businesses and start-ups in Germany are too slow and too cautious, because there are not enough incentives and not enough scope for action (such as sandboxes). In the interest of consumers, we need to improve the user experience, transparency and data sovereignty of public- and private-sector services. Standards and rules for technical infrastructure need to be market-driven and harmonised across Europe. Germany also needs to become more attractive as a place to work, so that we can assert ourselves against our global competitors when it comes to attracting and retaining digital talent.



² See the European Commission's Digital Economy and Society Index 2022 and the World Intellectual Property Organization's Global Innovation Index 2022, for example.

II. WHAT IS OUR VISION?

GERMANY – A STRONG CENTRE OF TECHNOLOGY AND INNOVATION IN EUROPE

Our vision for the financial market in 2030: We want German and European companies to achieve a high level of participation in leading-edge technological developments.

We will strengthen the cost-efficiency and resilience of German and European players through the use of modern technologies (cloud, AI, blockchain). Our cross-sector regulatory framework will create the right conditions to ensure legal certainty, efficient market structures, and a level playing field in the area of technological development, based on a transparent and workable balance between data protection and data use. Harmonised European financial market regulation will create high levels of transferability and scalability for companies within the European internal market. The way in which European rules are transposed into national law will be unbureaucratic and will avoid competitive disadvantages. European alliances in relevant areas such as payment and identity solutions will strengthen the European digital economy. In this way, we will create reliable and relevant digital solutions for individuals, institutions and businesses.

WHAT DO WE NEED TO DO?



PROMOTE TALENT, START-UPS AND INNOVATION

Compared with other countries across the world and especially in Europe, Germany has the potential to strengthen its competitive capacity. We must tap this potential.³

Support the recruitment of top talent: Employee profit-sharing needs to be attractive and internationally competitive, especially when it comes to taxation. We must make it possible for people to work remotely from anywhere, or at least from other European countries, without any risks or disadvantages to either employees (e.g. safety at work, tax treatment) or employers (e.g. unintended creation of permanent establishments). Skills-oriented migration to Germany must become quicker, more digital, and geared towards companies' needs – as in the Finnish model, for example. The current system - featuring multiple local registration offices for foreign nationals with lengthy application processes, difficult-to-obtain appointments, and one-size-fits-all case handling regardless of the applicant's value to the labour market - is a real obstacle.

Support companies that offer clear customer benefits and scalability: We need a decentralised, quick and pragmatic allocation of EU funds. This will enable targeted, internationally competitive EU support for growth-stage companies, not least in the area of venture capital. To this end, funding providers need greater tech expertise (as in Israel, for example).

Strengthen research and start-up culture:

Networks of science and research institutions, businesses and investors are needed in order to support the emergence of a start-up and innovation culture and enable the rapid development and evaluation of new technologies and business models. To bring the relevant stakeholders together and draw students and young professionals into the start-up and fintech world, (European) innovation centres for finance and insurance should be set up.

Promote financial literacy and create greater incentives for capital market participation:

By empowering citizens to become investors, we want to promote capital market participation and private pensions in Germany. Basic financial knowledge and skills should be taught at school. In order to encourage broad segments of the population to finance their pensions via the capital markets, we want to develop a plan for an uncomplicated and tax-privileged (retirement) savings product. Specifically, it is important for fintechs to be able to offer a tax-privileged retirement savings product without a capital guarantee. In addition, the savers' allowance should be raised significantly (based on the UK model).

³ See the World Intellectual Property Organization's Global Innovation Index 2022.

ACHIEVE FORWARD-LOOKING FINANCIAL MARKET REGULATION AND SUPERVISION

Standardise financial services regulation in the European single market: We need to make digital business models more transferable and scalable within the European single market. We also need to strengthen Germany's position by implementing European rules in a workable way, both when it comes to legislative efforts and supervisory practice. This applies in particular to "know-your-customer" requirements under anti-money laundering legislation. In addition, we should pursue a consistently risk-based approach to regulation: low-threshold market offerings (such as digital collectibles) should not be subject to general financial market restrictions.

Financial supervision as a business-location factor: Digital business-location development should be part of the mandate of the Federal Financial Supervisory Authority (BaFin). Quick, transparent, and digital authorisation processes have a direct impact on businesses and are essential to secure Germany's position as a modern financial centre in Europe. A fast-track option could help reduce the clash between innovation and authorisation cycles. Existing silos within financial supervision need to be broken up so that tech-based business models can be supervised effectively on the basis of risk. Agility and a positive mistake culture should be enshrined in financial supervision in a systematic way. This explicitly includes openness to business disruptors who champion new models – for example in the area of decentralised technologies.

Expand innovative approaches to regulation: We need effective and user-friendly regulation, featuring joint practical validation in pilot applications. An example of this is the large-scale pilot project on

digital identities. Establishing a regulatory sandbox (for example with lower capital requirements, based on the example of the Financial Conduct Authority in the UK) can facilitate market entry for young, innovative companies and enable innovative products to be tested. At the same time, financial stability and investor/consumer protection need to be maintained. Fundamentally, our approach should not just focus on potential risks, but should also consider potential lost opportunities in the international marketplace.

Strengthen the financial data economy: Data protection rules should be revised to make them more workable, while also respecting the principles of data ownership and transparency for consumers. In addition, the rules should be interpreted in a consistent way within Germany's federal system. In an interoperable data economy, both consumers and businesses should be able to use their own data to their own advantage. Extending data access rights (as set out in the EU's Payment Services Directive 2) to other sectors, such as insurance and investment companies, could encourage innovative business models with added value for consumers. The draft of the European Data Act is a good cross-sector example, not least in terms of compensation rights for data as a resource. To strengthen Germany's data economy, it is also important to establish standards for the use of non-European data processing services (such as cloud services) in a way that offers legal certainty.

Consistently eliminate legacy problems in existing legislation: If they wish, consumers need to be able to sign up for products and services in real time and

completely digitally. Written form requirements make seamless digital processes more difficult and should be avoided, as should excessive and duplicate consumer information requirements. It is also important to take a risk-based approach within the framework of existing legislation and enable electronic communication with consumers, for example in the area of occupational pensions or public funding programmes.

Establish Germany as a leader in tokenised financial services: Germany must create attractive conditions for companies whose business models are based on distributed ledger technology. This includes appropriate implementation of the EU's Markets in Crypto Assets (MiCA) Regulation in a way that does not put German companies at a disadvantage to their international competitors. MiCA should become the next global blueprint. When it comes to regulatory plans in the area of crypto, such as MiCA or the DLT Pilot Regime, it is important to focus on a workable consolidation with existing (national) rules and the transfer of existing authorisations. We need legal certainty for tokenised financial services, their transfer, and their treatment under insolvency and tax law. Practical research and development in the area of blockchain technology should be supported. Tokenised assets should be taken into account in schemes such as equity pensions. To build confidence in token-based business models, violations (for example in the area of advertising) should be subject to strict punishment.



BOOST THE DIGITAL ECONOMY AND IMPROVE INFRASTRUCTURE

Establish digital identity solutions with maximum reach: It is important to develop a digital, technologyneutral, impactful government-issued German identity document that has a wide range of practical applications. This could be achieved with a publicprivate partnership, which would provide the necessary infrastructural base and bring together the interests and requirements of the public and private sectors as a foundation for European activities. Digital identity solutions will only be widely successful if the public and private sectors work together closely. It is also crucial to take into consideration the user experience and scope of these solutions, which in turn requires the government to promote them more effectively. And if Germany wants to become an inclusive digital financial market within Europe, it is not only a national digital identity document that is important. Digital, fully automated, and legally sound identification processes for residents without German citizenship, among others, are also needed.

Develop a euro central bank digital currency

(CBDC): We want the euro CBDC to have a strong value proposition and tangible benefits for citizens and provide the highest degree of data protection and a technically guaranteed protection of privacy. For small transactions, it should be possible to use the euro CBDC – like cash – anonymously in line with anti-money laundering legislation. It is of central importance that citizens have the freedom to use their digital money without restrictions. The development of a euro CBDC should be based on democratic principles and have a clear governance system. Ideally, the euro CBDC should use

open-source technology to ensure transparency and trust and should be developed collaboratively by central banks and all involved interest groups. It should exhibit technological, regulatory and usage interoperability both locally and globally. A combination of a euro CBDC and digital identity solutions would also increase the digital potential of administrations. It is important that the European Payments Initiative and a euro CBDC complement one another. In addition, current discussions need to address retail CBDCs as well as wholesale CBDCs with a view to providing the European financial industry and the digital real economy with an efficient digital payment leg. This will secure the global competitiveness of the euro as a currency as well as the global competitiveness of the real economy.

Put in place a regulatory framework for euro **stablecoins:** Germany's regulatory framework should support the establishment of euro stablecoins in Germany. Clear rules are needed with regard to the programmability of stablecoins and their integration into existing payment systems. Opportunity and risk assessments need to be carried out with regard to the different forms of backing, among other things, taking into consideration the current Basel rules. In addition, there should be a uniform EU regulatory framework for euro stablecoins without too many technology restrictions in order to enable innovation in the area of Web3 - ideally through MiCA. The special characteristics and potential of euro stablecoins should be taken into account during the development of the euro CBDC.

Strengthen European payment transactions as critical infrastructure: To enable competitive cross-border payments within Europe with benefits for citizens, financial service providers and traders, it is important to support market initiatives such as the European Payments Initiative. A regulatory framework for an instant payments infrastructure, which is already standard in many countries including Brazil and India, can and should be developed to promote innovation.



ANNEX: CONCRETE MEASURES

- → Adapt the regulatory framework to enable trust accounts for payment institutions and e-money providers, in compliance with the Money Laundering Act (Geldwäschegesetz)
- → Address long time frames for securities account transfers
- → Analyse regulatory obstacles to euro stablecoins; create a regulatory framework for tokenised euro payment options
- → Clarify the possibility of insolvency-law rules for cryptoassets
- → Combine authorisation conditions for the DLT Pilot Regime and cryptosecurities registers
- → Conduct an opportunity and risk assessment for the various stablecoin backing options
- → Consistently abolish written form requirements in supervisory and civil law, especially in the areas of deferred compensation and funding applications
- → Create a communication platform on regulation for ongoing legislative efforts and supervision practices
- → Create a modern transparency register
- → Create legal certainty for the transfer of cryptoassets

- → Create legal certainty for the use of non-European cloud services
- → Enable AI-based identification procedures in compliance with the Money Laundering Act
- → Enable digital communication with consumers
- → Enable flexible working models
- → Enhance practicability and consistency in interpreting European data protection laws
- → Ensure that supervisors are open to innovative business models
- → Establish a sandbox approach in financial regulation
- → Expand the Electronic Securities Act to include digital shares and gradually other issuance forms, company types and financial instruments
- → Implement a planned EU AI Regulation in a workable way
- → Implement MiCA appropriately in Germany, avoiding competitive disadvantages and enabling Web3 applications as well as euro stablecoins; enable the direct conversion of existing national authorisations into MiCA authorisations
- → Improve suspicious transaction reports by optimising the Financial Intelligence Unit's feedback processes
- → Open up equity pensions to tokenised shares

- → Recognise blockchain as a key technology and take it into account accordingly in relevant legislative projects
- → Review the possibility of introducing an obligation to issue digital receipts
- → Set up (European) innovation centres for finance and insurance
- → Strengthen embedded insurance by creating data access rights
- → Strengthen employee profit-sharing and enhance its attractiveness
- → Update the digital pension overview