



BANK OF GREECE
EUROSYSTEM

HUB
FINTECH
innovation

ANNUAL REPORT

FINTECH
INNOVATION HUB

2019

Information about the

Central Bank's Innovation Hub is available at

<https://www.bankofgreece.gr/en/main-tasks/supervision/fin-tech-innovation-hub>

Firms interested in engaging with the Innovation Hub are encouraged to submit requests for information and guidance in navigating the supervisory and regulatory landscape, by filling in the [Contact form](#).

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SECTION 1: EXECUTIVE SUMMARY

In March 2019, the Bank of Greece (BoG), as part of its strategy to facilitate innovation and acting on an initiative from its Governor, Mr. Yannis Stournaras, launched its own FinTech Innovation Hub (“the Hub”). The Hub is to serve as a single point of contact for all firms (new or incumbent, regulated or unregulated, technology companies, etc.) and/or natural persons introducing or considering the adoption of innovative, technology-driven financial products, services or business models.

The Hub is designed to promote greater engagement between the BoG and firms about technology-enabled financial innovations with a view to enhancing firms’ understanding of regulatory and supervisory expectations and, at the same time, increasing the knowledge of the BoG about the opportunities and risks that these innovations present. The Hub benefits from the support and diverse expertise of eight different departments across the BoG, and has access to all relevant expertise within the BoG.

Since its launch, the Hub has received in total 36 enquiries from FinTech stakeholders: 70% of these enquiries came from start-ups, and the rest from established firms, technology companies, other regulators and law firms. The 80% of the firms that approached the Hub with an enquiry were not authorised by a competent authority. The 25% of the enquiries were a follow-up in the form of an additional round of queries or a presentation at BoG premises. The most prevalent type of the received questions, close to 65%, were related to regulatory and authorisation guidance, in certain cases those were blended with legal questions.

As expected, due to the recent changes in the relevant regulatory framework, the majority of enquiries received concerned payments (33%), followed by enquiries pertaining to Regulatory Technology (RegTech) and Account Information Service Providers (AISP), as introduced by PSD2. Only one enquiry came from an InsurTech firm.

The underlying technologies in question covered a broad spectrum, from Artificial Intelligence (AI) and Application Programming Interfaces (APIs), with each of these two categories accounting for 22% of total queries, to Distributed Ledger Technology (DLT), along with cryptoassets, electronic identification methods for digital onboarding, and cloud outsourcing.

The Hub’s purpose and activity were communicated to the public through a combination of over 40 speeches, articles, papers and presentations.

The key takeaway from the Hub’s first year of operation is that the Greek market would benefit further from a more enabling and agile legal and regulatory environment fully supportive of innovation. Moreover, the COVID-19 pandemic is expected to provide additional impetus to contactless payments and digital solutions, which are changing the way we operate in our day-to-day lives.

In this context, the establishment of a Regulatory Sandbox within the BoG, as a “live” testing environment, would yield positive results. The BoG has thus requested support from the European Commission (EC) in establishing a Regulatory Sandbox to facilitate FinTech and Innovation in Greece.

SECTION 2: INTRODUCTION - OVERVIEW OF THE FINTECH INNOVATION HUB

In a rapidly evolving Financial Technology (FinTech) ecosystem, the BoG, within its regulatory mandate, has a keen interest in the timely monitoring of the risk implications of innovative business models of financial institutions and to constantly review its authorisation approaches, while also facilitating the smooth introduction of new innovative financial products and services in the Greek market, to the benefit of consumers, businesses and the economy at large.

In the pursuit of these objectives and considering that FinTech-related developments may be outside its direct regulatory perimeter, the BoG decided to enhance its understanding of FinTech activities by engaging in a more active dialogue with FinTech entities. To this end, it launched its Hub in March 2019. The Hub is open to all queries regarding the implementation of a FinTech-related innovative concept. Thus, the Fintech industry stands to benefit from prompt and timely information and clarifications of a non-binding nature on supervisory or regulatory requirements, within the BoG's scope of responsibility.

A standard procedure has been set up for contacting the Hub: interested parties fill out an electronic form available on the [BoG's website](#), providing identification details, a description and the implementation status of the proposed innovative product or service, as well as the subject of the query.

The Hub is supported by a multi-disciplinary team of experts, providing a wide range of expertise, including supervision of credit and financial institutions, on-site inspections, supervision of insurance undertakings, financial stability, payment and settlement systems, financial

markets operations, information systems and legal services. The team is responsible for analysing the incoming queries, collecting and processing information from across the BoG's Departments depending on their field of competence and formulating the final responses. The team members may also host or participate in meetings with entities engaging with the Hub, where deemed appropriate.

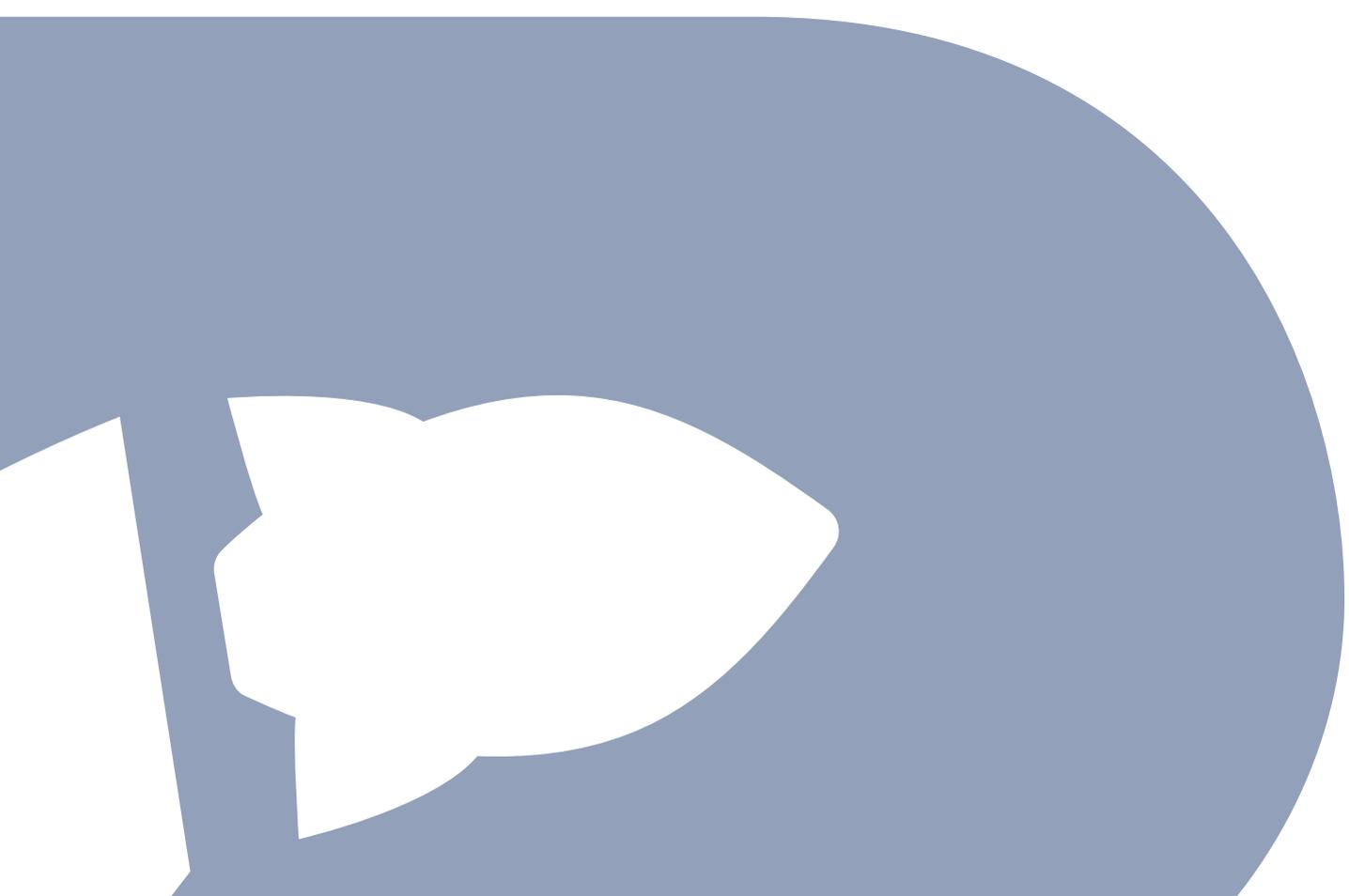
It should be noted, that a significant part of the financial innovation activities in Greece were set in motion after the implementation of the revised payment services Directive (Directive (EU) 2015/2366, commonly referred to as PSD2), transposed into Greek legislation with Law 4537/2018. PSD2 is perceived as an enabler of new and innovative payment solutions taking advantage of open finance APIs, as well as DLT, AI and other technologies. Entities all over Europe are exploring ways to disrupt the market and offer competitive financial products or services, and in some cases have expanded their interest beyond strictly payment-focused solutions. As a result, a growing number of entities have shown interest in obtaining authorisation as payment or e-money institutions.

SECTION 3: ENQUIRIES ANALYSIS

Since its launch in March 2019, the Hub has received 36 enquiries, of which 35 were from firms and one from another supervisory authority. The processing of these enquiries has helped the BoG enhance its knowledge of how innovation is developing in the Greek financial services industry.

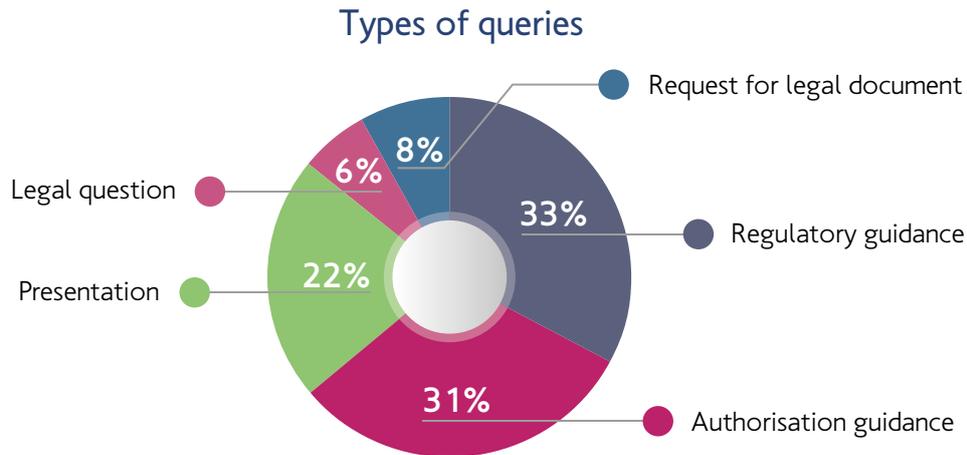
Despite different degrees of complexity, the Hub aimed to respond to all received enquiries in the shortest time possible. There were nine instances in which the enquiries were a follow-up on a previous one.

Regarding the types of firms engaging with the Hub, 70% were start-ups and 30% established firms, technology companies, other regulators and law firms.



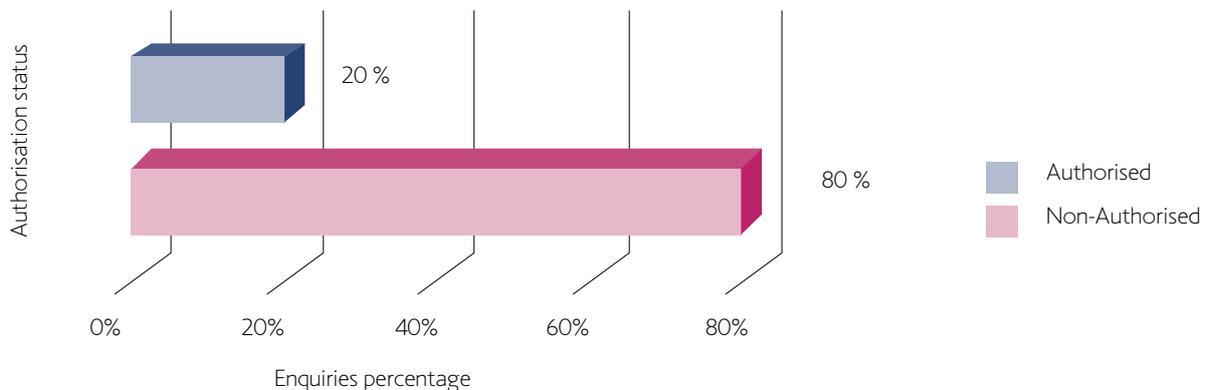
Types of queries

Start-ups mainly sought regulatory and authorisation guidance, concerning payments and the revised payment services directive (PSD2), in view of possibly engaging in such activities.



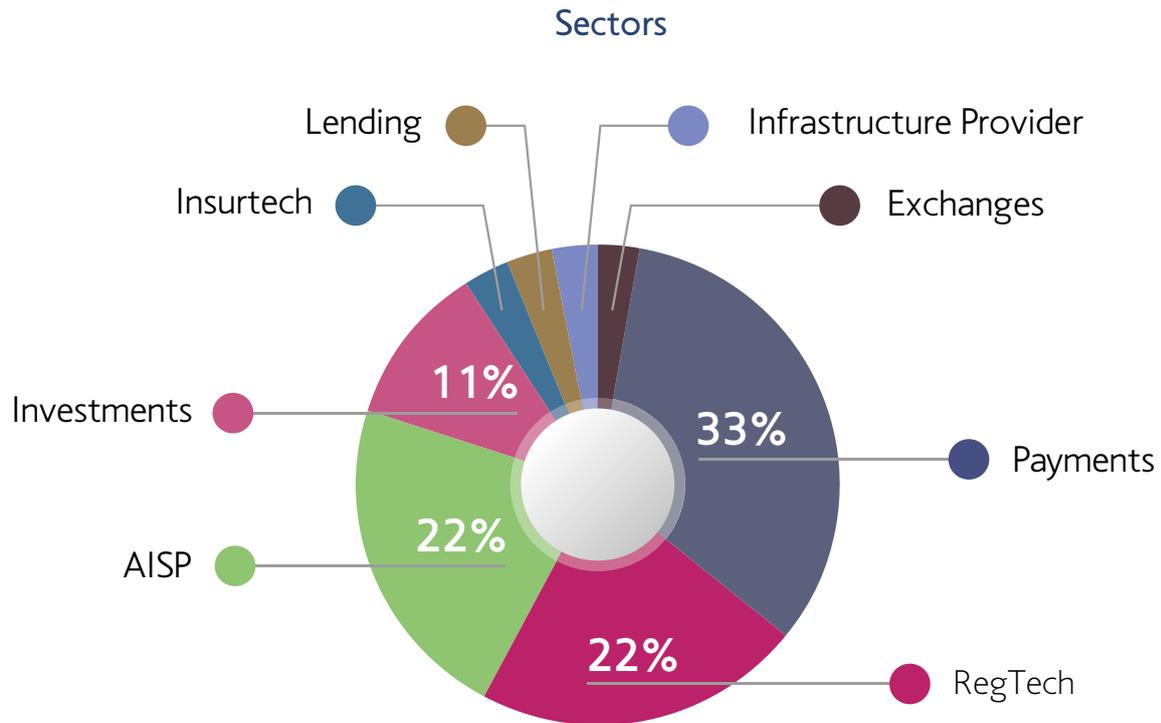
Established firms, on the other hand, were more interested in the BoG’s policy approach to innovation, the authorisation process and in pitching their product to the BoG, either by including related information in the enquiry they had submitted or by requesting a follow-up demo meeting. In some cases, their enquiries also concerned legal questions or requests for legal documents.

Authorisation status %



While the Hub is open to both authorised and non-authorised firms, 80% of the incoming enquiries were from non-authorised firms. This metric is indicative of just how much the Hub serves as a communication focal point for firms currently outside the direct regulatory perimeter.

Business sector categories



As mentioned previously, the recently enforced PSD2, has had a substantial positive impact on innovation in the financial sector. This clearly emerges from the analysis of the different business sectors that have engaged with the Hub during its first year of operation.

Payment-related firms submitted the most enquiries to the Hub since its launch, followed by Account Information Service Providers (AISP), as introduced and regulated by PSD2, and RegTech firms, in second and third place respectively. Investments were fourth, while the remaining enquiries came almost equally from across the other sectors.

Payments

33% of the enquiries were from Payments-related firms, with three out of four seeking authorisation and regulatory guidance on solutions in areas such as e-wallets, P2P payments and loyalty platforms.

RegTech

22% of the enquiries were from RegTech firms. RegTech firms offer technological automation solutions to regulatory processes to other firms in the financial services sector, allowing the latter to improve their efficiency in areas such as risk management, regulatory reporting and compliance. As RegTech firms do not usually require authorisation from the BoG, most of their enquiries were focused on regulatory guidance regarding the implementation of their solutions by potential clients.

Through its engagement with RegTech firms, the Hub has come across applications in such areas as:

- Customer digital onboarding, where firms enable the remote identification of customers through software solutions that automate the know-your-customer (KYC); due diligence; and identity verification processes.
- Compliance and risk management solutions, enabling authorised firms to ensure that the processing of legal information by means of artificial intelligence and machine learning is performed in an efficient manner and that all results are explainable and transparent.

Account Information Service Providers (AISPs)

22% of all enquiries were from AISPs, either already authorised or aiming for authorisation, seeking regulatory or authorisation guidance. AISPs are market players that retrieve account information data from banks and financial institutions, mainly through open banking interfaces, and use them to build new services for customers.

The most common and obvious service provided by AISPs is account information aggregation, which offers customers an overview of all their accounts held with different financial institutions, possibly enriched with added value services such as reporting and extensive data analysis.

The majority of AISPs that engaged with the Hub mainly offered credit-scoring applications based on the processing of aggregated account data with Big Data analytics and AI.

Investments

Investments related firms ranked fourth among the sectors engaging with the Hub; 50% of these firms were international companies. In most cases, their business model involved wealth management and the provision of investment advice to their customers based on the analysis of their account information data.

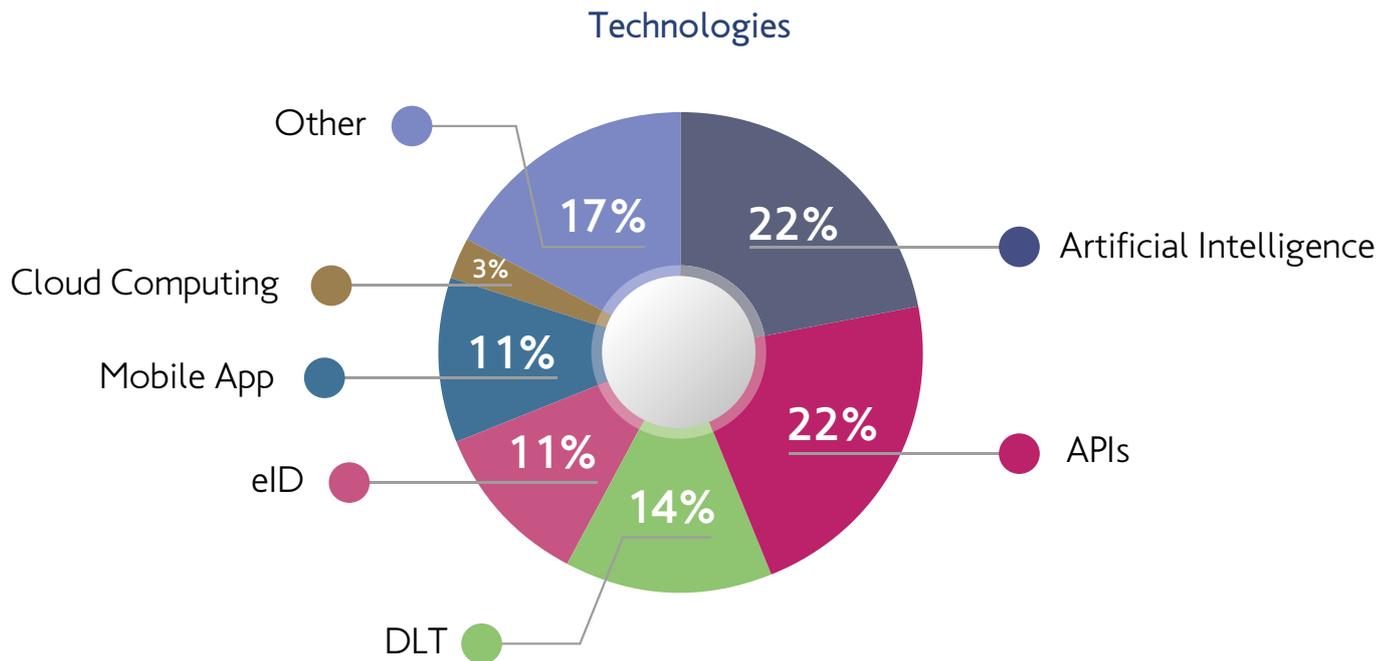
Other sectors

Apart from the previous four sectors, the remaining 12% of enquiries were from firms belonging to other sectors such as InsurTech, Exchanges, Infrastructure Providers and P2P lending. Their questions focused on the regulatory compliance of products or services involving technologies such as cloud computing or cryptoassets.

¹ Financial Stability Board (2017), "Financial Stability Implications from Fin-Tech: Supervisory and Regulatory Issues that Merit Authorities' Attention".

Technologies

Technology is the main enabler of firms to implement innovative solutions that automate internal manual processes and offer customers an intuitive digital experience. The queries received covered a broad spectrum of technologies, currently considered as key building blocks for innovative financial services.



Artificial Intelligence – AI

The Hub engaged with eight firms deploying AI within their offered products or services. The use of AI enabled them to automate manual processes such as data extraction and analysis, offer tailored loan products based on their customers' financial behaviour or develop intelligent credit scoring systems.

Application Programming Interfaces – APIs²

The Hub received eight enquiries from firms relying on the use of APIs in order to be able to offer their service or product. All of these cases were in the Payments, AISP and Investments sectors, for applications retrieving account information data from the financial institutions' APIs, mostly in the context of PSD2-enabled open banking.

Distributed Ledger Technology – DLT

Five enquiries received by the Hub were from firms that had developed or were planning to develop solutions using DLT. These solutions were implemented in various sectors such as Payments, Exchanges or RegTech. Examples of such applications were cryptocurrency trading monitoring tools and P2P lending platforms based on smart contracts.

Electronic identification – eID

The Hub also received several enquiries concerning electronic identification solutions, which allow financial institutions to digitally onboard new customers by remotely conducting the required KYC process. It should be noted that electronic identification has become a major preoccupation in Greece over the past year and has prompted discussions within the regulatory authorities leading to new upcoming regulatory action.

² According to the BIS, an API is “a set of rules and specifications for software programs to communicate with each other that forms an interface between different programs to facilitate their interaction.” BIS (2019), Report on open banking and application programming interfaces.

SECTION 4: LOOKING FORWARD

The BoG has requested support from the European Commission in establishing a Regulatory Sandbox to facilitate FinTech and Innovation in Greece. The project started in Q2 2020, with the [procurement request](#), and an estimated overall duration of 18 months. It is funded by the European Union and implemented by the European Bank for Reconstruction and Development (EBRD), in cooperation with the European Commission and the BoG. Once set up, the regulatory sandbox will be fully operational by the BoG.

The BoG will be providing an update on the operation of its Hub on a yearly basis.



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