



Banc Ceannais na hÉireann
Central Bank of Ireland

Eurosystem



Innovation Hub

2020 Update

Information about the
Central Bank's Innovation Hub
is available at

www.centralbank.ie/regulation/innovation-hub

Firms interested in engaging with the
Innovation Hub are encouraged to email us at
fintech@centralbank.ie

Executive Summary

The Central Bank of Ireland launched its Innovation Hub in April 2018. The Innovation Hub provides a direct and dedicated point of contact for all firms innovating in financial services, from start-ups to incumbents.

Each year the Innovation Hub publishes an update on its operations in the previous year. This update firstly provides headline figures on all Innovation Hub enquiries since our launch. It then provides a focused overview of 2020 activity including the rate and nature of enquiries and a deeper analysis of observed trends in financial innovation. Finally, this update includes details of our engagements with innovation-related stakeholders.

Since our launch, the Innovation Hub has facilitated a total of 253 engagements: 183 through enquiries from firms innovating in financial services and 70 with stakeholders. Throughout this time, the general profile of enquiry firms has remained consistent: they have been smaller-sized entities operating outside the regulatory perimeter many of whom are early stage start-ups. Regtech and payments firms have provided the most amount of enquiries.

In 2020, the Innovation Hub received a total 70 enquiries from innovating firms, representing a 25% increase over 2019. The year also saw a 20% year-on-year increase in authorisations-related enquiries, with most of these from the payments, markets and exchanges, and lending sub-sectors.

Through our engagements over 2020, the Innovation Hub has identified two high-level trends:

1. **An increasing shift toward a more data-driven financial sector.** Here we have seen solutions focused on how to enable data transfer by, for example, seeking to register as an Account Information Service Provider (AISP) under the revised Payment Services Directive (PSD2), and how to analyse non-financial factors in the digital age.
2. **The growth and maturity of blockchain in financial services.** This is observed through more examples of blockchain deployment use cases broadening to be one element in the overall technology stack of a firm's solution, and the increased development of crypto asset-enabling infrastructure and services.

In 2020, the Innovation Hub held 20 stakeholder engagements. Two of these were virtual Outreach events at established regional hubs: one in

Portershed, Galway and the other in Dundalk IT. Through these information sessions, the Innovation Hub connected directly with just under 100 firms and stakeholders thus increasing awareness of the Innovation Hub and encouraging more enquiries.

1. Introduction

The Central Bank established the Innovation Hub to facilitate open and active engagement with firms innovating in financial services. It does this by providing a direct and dedicated point of contact for all firms, from small start-ups to incumbents, to engage with members of the Central Bank's Fintech Network. The Fintech Network is comprised of over 20 representatives from across all four pillars of the Central Bank.¹

By helping the Central Bank to identify and act upon the emerging benefits and risks presented by financial innovation, the Innovation Hub supports the Central Bank's public interest mission and our regulatory mandate to ensure that the financial system operates in the best interests of consumers and the wider economy. It also helps us to enhance our understanding of technology developments in the market and the related challenges these give rise to, both for consumers and for regulated entities.

This update firstly provides headline figures on all Innovation Hub enquiries since launch. It then provides a focused overview of 2020 activity including the rate and nature of enquiries and a deeper analysis of observed trends in financial innovation. Finally, this update includes details of our engagements with innovation-related stakeholders.

2. Innovation Hub Enquiries

Since the Innovation Hub Launch in April 2018

From launch to end December 2020, the Innovation Hub has facilitated a total of 253 engagements: 183 through enquiries from firms innovating in financial services and 70 with stakeholders. Throughout this time, the general profile of enquiry firms has remained consistent: they have been from smaller-sized entities operating outside the regulatory perimeter, many of whom are early stage start-ups.²

Regtech and payments firms continue to provide the most amount of enquiries with the former more likely to seek to demonstrate their product

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¹ The four pillars are: Central Banking, Prudential Regulation, Financial Conduct and Operations.

² Specific figures: 82% unregulated, 82% SMEs, 40% early stage start-ups.

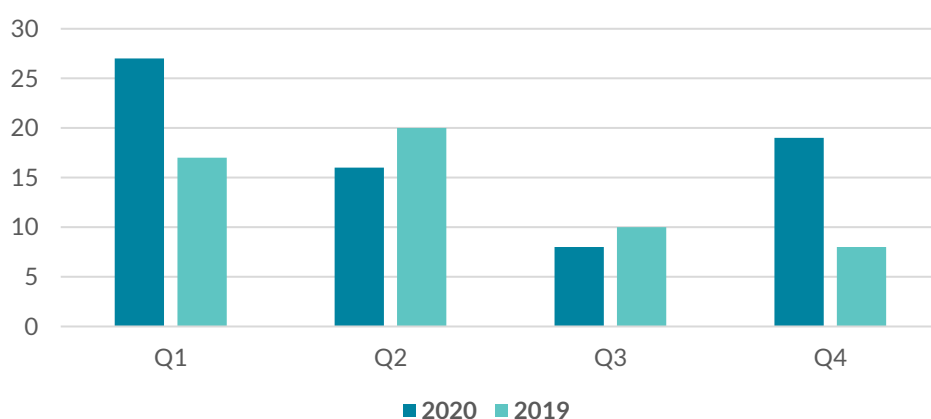
and understand our supervisory approach, and the latter more likely to ask about authorisation.

To note, while the Innovation Hub cannot endorse or provide opinions on any solution, or give legal advice, we welcome the opportunities to share insights on the things that we, as a regulatory and supervisory authority, consider important.

Enquiries during 2020

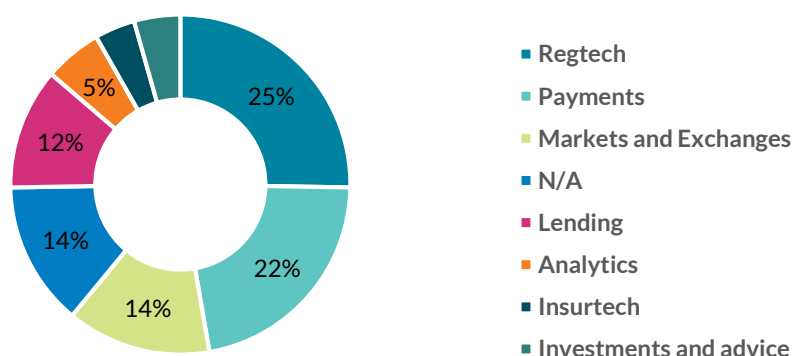
Despite the impact of COVID-19, the Innovation Hub has remained open and active in our engagement with firms and stakeholders throughout 2020, pivoting our interaction model to direct calls and facilitating virtual meetings to ensure continued connectivity.

Rate of Enquiries



...mostly contacts from smaller-sized entities operating outside the regulatory perimeter, many of whom are early stage start-ups

Nature of enquiries



In 2020, the Innovation Hub received a total 70 enquiries from firms, representing a 25% increase over 2019. Regarding the profile of firms, the high-level trends from 2019 have continued into 2020, such as:

- Regtech and payments subsectors continue to be the most popular, with 47% combined.
- 82% of enquiries are from SMEs.

- 41% of enquiries from early stage start-ups.
- 86% of enquiries from unauthorised firms.

As to the reason for engagement, in 2020 the Innovation Hub saw a 20% year-on-year increase in authorisations-related enquiries, with the majority of these coming from the payments, markets and exchanges, and lending subsectors.³

3. Identified Trends in Financial Innovation

From analysing 2020 enquiries, the Innovation Hub has identified two high-level trends with two respective sub-trends. These are:

- a. Increasing shift to a more data-driven financial sector
 - i. How to enable data transfer
 - ii. How to analyse non-financial factors in the digital age
- b. The growth and maturity of blockchain
 - i. Blockchain deployment uses cases broadening
 - ii. The increasing growth of crypto asset-enabling infrastructure and services

a. Increasing shift to a more data-driven financial sector

As financial services trends toward digitalisation, questions around data - such as how to get it, how to process and analyse it - are becoming increasingly important. In 2020, the Innovation Hub observed this from enquiries focussing on two areas: how to enable data transfer and how to analyse non-financial factors in the digital age.

i. How to enable data transfer

In 2020, the Innovation Hub received a cluster of enquiries related to registering as an AISP under PSD2.

...a cluster of enquiries related to registering as an AISP under PSD2

Registering as an AISP allows a market player access to a user's bank account information so that they can pull that data across to their own system, often with a view to building new advisory and information services. An AISP has no agreements with the user's bank but a customer can give it full access to all their account information.

Two examples of AISP use cases observed by the Innovation Hub are:

- i. an app that helps its users achieve savings targets by providing analysis on their spending behaviour; and,

³ Detail on authorisation frameworks across different sectors is available at the Central Bank's website at: <https://www.centralbank.ie/regulation/industry-market-sectors>

- ii. a solution that analyses transaction data to help automate credit scoring for lenders.

The Innovation Hub has also seen non-traditional use cases, such as accounting firms looking to register as AISP's to help auto-import financial accounts. To note, the analytical component of these solutions can often involve Artificial Intelligence (AI) deployment.

Elsewhere, the Innovation Hub has seen larger incumbent institutions looking at using Application Programming Interfaces (APIs), which allow for safe and secure data transfer between apps, to enable the sharing of data between multiple parties.

Another consideration with data transfer is the question of privacy: how to share personal, potentially sensitive data without revealing identity credentials, with the Innovation Hub having received enquiries from a number of firms focusing on this issue.

ii. How to analyse non-financial factors in the digital age

Enquiries show firms attempting to convert qualitative, non-financial information into more structured data for the digital age.

For example, the Innovation Hub has observed an increase in the number of technology solutions which seek to help financial services firms measure and manage conduct risk. While some of the solutions were still at a conceptual phase, the Innovation Hub also saw fully developed conduct risk and compliance culture solutions that generated metrics to help firms generate insight to these areas of their business.

Other similarly themed solutions included those using publicly available and accessible data, such as from corporate disclosures, to analyse and benchmark compliance standards. Or another that used online news sources to help measure and manage non-financial risks. This solution deployed a subset of AI called Natural Language Processing (NLP) to extract the insights from the data.

NLP helps computers understand and process unstructured human language, whether that be in speech or text form. It is one of the underpinning technologies for numerous AI-based financial services applications such as chatbots. The Innovation Hub has seen NLP used before, for example, to extract insights from the publications of regulators across the globe to help regulated firms manage compliance risk.

...firms attempting to convert qualitative, non-financial information into more structured data for the digital age

b. The growth and maturity of blockchain

The EU Commission states that “blockchain can enable parties with no particular trust in each other to exchange data on a peer-to-peer basis with fewer

or no third parties or intermediaries.”⁴ It anticipates the technology will have a profound impact over the next 10-15 years.

i. Blockchain deployment uses cases broadening

Pre-2020, blockchain-related Innovation Hub enquiries mostly focused on crypto-assets. However, in 2020, the Innovation Hub began to see more firms using blockchain as one element in the overall technology stack of their solutions for the purpose of providing an immutable record of information to promote transparency. Firms propose that such a deployment can foster trust and thereby reduce the need for third party verification mechanisms. For example, we saw blockchain being used as part of the Know Your Customer (KYC) process, and in a mutual fund to record the asset calculations and transactions, and finally in a shared asset ownership structure as a means to lock in investor identity and financial and contractual details.

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ii. The increasing development of crypto asset-enabling infrastructure and services

On the crypto asset side, in 2020 the Innovation Hub saw an increase in enquiries from crypto-asset exchanges and wallet providers. Many of these firms wished to understand the Central Bank’s policy approach to crypto assets and/or to ask questions on our authorisations process. The Innovation Hub also saw an increase in enquiries related to firms developing or providing advisory services on a Central Bank Digital Currency. This is in addition to enquiries on potential Virtual Asset Service Provider registration under AMLD5.

4. Stakeholder Outreach

As well as facilitating enquiries, the Innovation Hub actively engages with a broad range of innovation-related stakeholders including academics, industry representative bodies, other regulators, co-working spaces and accelerators. In 2020, the Innovation Hub held 20 stakeholder engagements. Two of these were Outreach events: one in [Portershed, Galway](#) and the other in [Dundalk IT](#). With these information sessions, the Innovation Hub sought to connect directly with firms and stakeholders via established regional hubs to increase awareness and encourage enquiries. We look forward to continuing this proactive engagement in 2021 with more events already in the pipeline. As we build our network, we will also seek to host more events specifically tailored to the needs of enquiry firms.

Outreach events
were held in
Portershed
Galway and
Dundalk IT, with
more planned for
2021

Importantly, the Innovation Hub contributes our findings from local engagements into EU bodies, for example through our membership of the

⁴ EU Commission, [Blockchain Now And Tomorrow](#)

European Forum for Innovation Facilitators (EFIF). The EFIF was established to bring together innovation facilitators from national competent authorities and representatives from the three European Supervisory Authorities in order to foster common supervisory responses to technological innovation in the financial sector.

5. Looking Forward

This update has shown that over 2020, the rate of enquiries and profile of firms engaging with the Innovation Hub has remained broadly in line with that of 2019. However, the focus toward harnessing the power of data and the growth and maturity of blockchain-based enquiries stand out as two observed trends. The Innovation Hub will continue to act as the first point of contact for firms who wish to discuss the Central Bank's regulatory and supervisory approach and looks forward to facilitating ongoing connection between innovative firms and relevant specialists on the Central Bank's Fintech Network.

The Central Bank remains committed to open and active engagement with all innovation-related firms and stakeholders. In 2021, we will continue to engage through the Innovation Hub and Stakeholder Outreach programme and will provide an update of our 2021 findings and observations of these initiatives in early 2022.

Additional information about the Central Bank's Innovation Hub, including any upcoming events, is available at

www.centralbank.ie/regulation/innovation-hub

Firms interested in engaging with the Innovation Hub are encouraged to email us at

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