

Innovation Hub 2019 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

This document builds on the 2018 Innovation Hub Update with an updated analysis of learnings derived from across the entire duration of the Innovation Hub's operations.

The Innovation Hub is open to existing regulated firms, firms that are considering regulation and firms that do not require regulation. Since its launch in April 2018, the Innovation Hub has facilitated 166 engagements including 114 enquiries from firms. Of these, 37% were early stage start-ups, 70% were either small or micro sized enterprises and 92% were unauthorised by the Central Bank.

Start-ups had a greater tendency to ask questions on the regulatory perimeter for future considerations of their solutions, whereas established firms were more likely to seek a discussion on the Central Bank's policy approach to innovation and on our authorisations process.

Regtech firms have engaged with the Innovation Hub the most, accounting for 26% of total enquiries. These firms were most likely to request to demonstrate their product to the Central Bank. Payments, the second most popular subsector, saw 19% of enquiries with the majority having questions on the authorisations process. The third most popular subsector, Markets and Exchanges, saw the highest adoption of advanced technologies with 72% of enquiries involving blockchain/DLT applications; these were almost entirely comprised of internationally based firms.

The majority of firms that have engaged with the Innovation Hub have been focusing on unbundling the financial services value chain, targeting individual core functions to create a more tailored and user-friendly digital experience.

Regarding Artificial Intelligence (AI), we have seen the technology adopted across all sizes of firms and all Fintech subsectors. On blockchain/DLT, where the applications under development were more advanced than proofs of concepts the firms had ambitious strategies to build new financial services infrastructures.

The Innovation Hub also openly and actively engages with innovationrelated stakeholders, to date holding 52 stakeholder engagements. In 2019, these included making three outreach visits to Fintech related innovation labs, R&D centres and accelerator programmes.

2. Introduction

The Central Bank of Ireland (the Central Bank) launched its Innovation Hub in April 2018 to enable open and active engagement with all firms innovating in financial services. With the Innovation Hub, these firms have a direct and dedicated point of contact at the Central Bank as a means to, for example, ask questions on the authorisations process, the regulatory framework or to have a conversation with the Central Bank on their product or service outside of more formal regulatory interactions.¹

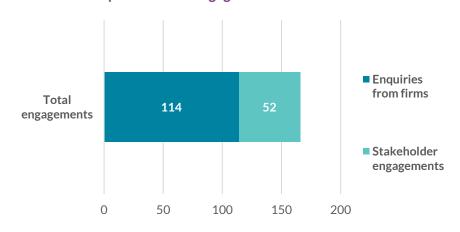
... a direct and dedicated point of contact

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 build on our understanding of the rapidly evolving technological landscape in which we—and the regulated firms and individuals that we supervise—operate.

In February 2019, the Central Bank published a look back at the Innovation Hub's operations over 2018 (see 2018 Update). This document adds to the 2018 Update with a more detailed analysis of findings from across the entire duration of the Innovation Hub's operations from launch to 31 December 2019. It draws primarily on the intelligence gathered from Innovation Hub engagements, with support from the Fintech Network.²

3. **Innovation Hub Enquiries**

Innovation Hub Enquiries - Total Engagements



... 166 engagements including 114 enquiries from firms

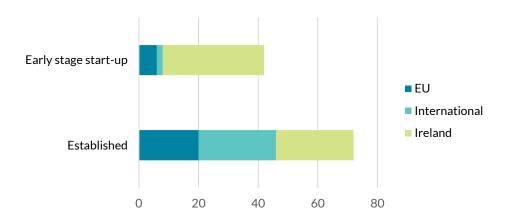
Since launch, the Innovation Hub has facilitated 166 engagements, including 114 enquiries from firms and 52 from stakeholders. Through

¹ For more detail on what we do, what we do not do as well as our assessment criteria see our FAQ

² The Innovation Hub is supported by a network of representatives from over 20 divisions within the Central Bank. This means that when a firm contacts the Innovation Hub, it is able to access and engage with the relevant expertise from across the organisation.

these and their resulting direct engagements,³ we have been able to enhance our intelligence of how innovation in financial services is developing.

Innovation Hub Enquiries - Development Stage / Location

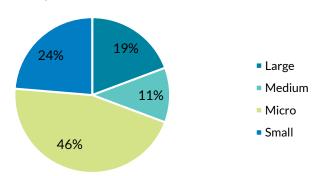


37% of enquiries were from early stage start-ups

Regarding development stage, 37% of enquiries from firms were from early stage start-ups⁴ with 80% of these Irish founded firms. Start-ups had a greater tendency to ask questions on the regulatory perimeter for future considerations of their solutions.

More established firms were more likely to have practical questions on our policy approach to innovation, the authorisations process, and to seek to demonstrate their product to the Central Bank. These included EU and internationally founded companies who used the Innovation Hub as the first point of contact to enquire about being authorised by the Central Bank.

Innovation Hub Enquiries -Size



While open to all firms, small and micro size enterprises are contacting the Innovation Hub in the greatest numbers

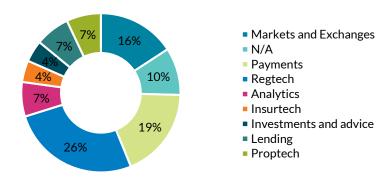
While open to all firms, small and micro size enterprises are contacting the Innovation Hub in the greatest numbers together accounting for 70% of all enquiries. Furthermore, 92% of enquiries were from firms unauthorised by the Central Bank.

³ Direct engagement was a meeting or where this was not possible, phone call with the firm

 $^{^4}$ Early stage start up is broadly defined as either not having a minimum viable product, a website or a team of < 2.

4. **Subsector Findings**

Subsector Findings - Fintech Subsector⁵



As in 2018, Regtech and Payments firms have engaged with the Innovation Hub the most. Markets and Exchanges was the third most popular subsector with the rest evenly spread across the other subsectors.

4.1 Regtech

26% of enquiries were from Regtech firms, which, by the nature of their business have other firms (often regulated) as their customer base. The Regtech firms themselves will not therefore typically ever require authorisation by the Central Bank. They generally provide cloud-based, platform-like solutions to help regulated firms increase the efficiency and effectiveness of their compliance functions and risk management. Almost three out of four of all Regtech firms wished to demonstrate their product to the Central Bank.

Common Regtech applications the Innovation Hub came across include:

- 1. KYC solutions: These firms focus on developing software for firms to use in conducting customer due diligence and identity verification for KYC compliance requirements.
- 2. Risk Management and Compliance Monitoring solutions: These firms look to provide platform-like solutions for firms' compliance and risk management functions. The solutions for example promise to automate the interpretation and application of regulatory rules in order to flag potential issues. The providers claim their solution leads to more efficiently managed workflows through eliminating manual processes and/or processing data to create/identify meaningful information for the firm. The funds industry is the main target market.

Regtech firms have engaged with the Innovation Hub the most. accounting for 26% of firm enquiries

Almost three out of four of all Regtech firms wished to demonstrate their product

⁵ N/A refers to enquiries where for example, the enquiry was from an academic institution professional services company

4.2 Payments⁶

19% of the Innovation Hub enquiries were payments related with 57% of these involving questions on authorisations. While much of this information is publically available on the Central Bank's website, firms appear to appreciate the opportunity to discuss the process directly with the Central Bank outside of formal channels.

2019 saw a slight decrease in payments related enquiries. However, of note was an increase in the payments related enquiries from larger, regulated firms.

4.3 Markets and Exchanges

16% of enquiries were from firms in the Markets and Exchange subsector with questions generally relating to authorisations and our policy approach to innovation. Of note is the vast majority of firms were internationally based. Regarding technology deployment 71% were focused on blockchain technology applications (59% of these were crypto asset related) with algorithmic trading applications second most popular. As a result, this subsector is where we see the greatest amount of advanced technology being deployed.

4.4 Insurtech

The Innovation Hub has had limited engagement with Insurtech firms, representing only 4% of overall enquiries. However, these few engagements have resulted in direct engagements with firms developing models to offer on-demand insurance.

5. **Technologies**

5.1 'Unbundling'

The majority of firms that have engaged with the Innovation Hub have been focusing on unbundling the financial services value chain, targeting individual core functions to create a more tailored and user-friendly digital experience. This is largely achieved through developing platforms, often hosted on the cloud, that provide an extra layer between back-end systems and front-end mobile/web applications, facilitating communication and

The majority of firms have been focusing on unbundling the financial services value chain

^{71%} of firms in the Markets and Exchanges subsector were focused on blockchain technology applications

⁶ The launch of the Innovation Hub coincided with two significant external developments impacting the payments sector: the implementation of the second Payments Services Directive (PSD2), and the period following the United Kingdom's invocation of Article 50 of the Treaty of the European Union (Brexit). These two factors have driven much of the payments-related engagement with the Innovation Hub, as well as a significant increase in the number of payments services application lodged with the Central Bank.

sharing of data across the value chain. These platforms can take the form of both retail models, such as savings apps, and institutional models, such as in compliance monitoring solutions, with a key consideration for the client being the ease of integration with existing systems.

5.2 Blockchain / DLT

The Innovation Hub received enquiries from 19 firms who are actively deploying or who had plans to deploy blockchain technology applications. These enquiries came predominantly from two subsectors: Markets and Exchanges and Payments. Where applications were more advanced than proofs of concept or distant adoption plans the firms had ambitious strategies to build new financial services infrastructures.

5.3 AI

The Innovation Hub engaged with 21 firms deploying AI with its use spread evenly across all sizes of firms, with Regtech applications the most frequent. The AI has ranged in scope from focusing on just one particular process e.g. enhancing search functions for KYC screening to more advanced data processing algorithms with multiple use-cases e.g. market monitoring or fraud detection. The Innovation Hub has so far encountered no consumer facing AI applications.

6. Stakeholder Outreach

In addition to providing an access point for firms to contact the Central Bank, the Innovation Hub openly and actively engages with a broad spectrum of innovation-related stakeholders including academics, industry associations, other regulators, incubators and accelerators. To date, the Innovation Hub has facilitated 52 stakeholder engagements.

In 2019, these included making three outreach visits to Fintech related innovation labs, R&D centres and accelerator programmes. One of these involved giving an information session at UCC on what the Innovation Hub can offer firms. We will continue this in 2020 as we seek to meet more stakeholders and firms.

In addition, in response to the relatively small number of Insurtech related enquiries, the Innovation Hub hosted a half-day Insurtech discussion event in May. The event featured three Insurtech firms each separately presenting on their product offerings and in the process giving the Central Bank a deeper understanding of innovative activities underway in the subsector.

52 engagements with a broad spectrum of innovationrelated stakeholders

7. **Looking Forward**

The Central Bank remains committed to open and active engagement with all innovation-related firms and stakeholders. In 2020, we will continue to proactively engage through the Innovation Hub and Stakeholder Outreach programme. We will provide an update of our 2020 findings and observations of these initiatives in early 2021.

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

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