



G+D participates in Brazilian central bank's digital currency initiative

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Giesecke+Devrient

The planning for Brazil's central bank digital currency, the Real Digital, is entering a new phase. The Banco Central do Brasil (BCB) has selected Giesecke+Devrient's CBDC solution Filia for its dual offline payment capability in a challenge that evaluates use cases of a digital currency in the South American country.

The central bank's digital currency (CBDC), the Real Digital, is to be launched in Brazil as early as 2024. This would position Brazil among the first major countries to have a CBDC as a complementary alternative to cash. In preparation for this major step, the Brazilian Central Bank in partnership with the national Federation of Associations of Banco Central Servers (Fenasbac) initiated the program "[LIFT Challenge Real Digital](#)" to evaluate use cases and the best technologies for the ambitious project.

The LIFT challenge aims to identify the fundamental characteristics of an infrastructure for the Digital Real. This infrastructure should be able to support the presented use cases, that will mature during the period of the challenge, to bring new functionalities to the Brazilian payment system and add value to the Brazilian society.

The implementation phase is now starting for nine of the 47 submitted projects and will conclude at the end of July 2022. G+D's proposal was selected for Filia's capability of dual offline payments – payments when both the payer and payee are without access to the internet or power supply.

Secure digital payment with Filia – also offline

A CBDC is a digital alternative and complement to cash. It will promote financial inclusion by being accessible to everyone, regardless of their social status, location and ability to access bank accounts, payment service providers or the internet. So, unlike existing digital payment solutions, it must have an offline function that enables all users to make payments anytime and anywhere.

G+D developed its token-based solution with the vision to enable secure consecutive offline payments. This functionality is enabled by the Filia protocol coupled with secure hardware elements, such as the chip found in payment cards. The Filia protocol handles the processing of payment transactions between offline wallets and ensures that only mutually authorised wallets are allowed to do so. It also prevents money from being lost, or transferred twice, if the connection is interrupted during a transaction. Transfers can also be made via hardware devices such as smart cards, wearables or key fobs and do not require either the payer nor the recipient to have a bank account. This ensures the users of a CBDC are independent of expensive devices and network availability, making it a secure and inclusive digital means of payment for all.

Open platform for third-party solutions

G+D's CBDC solution aims to be a platform where private sector players can innovate upon. Software development kits are part of the offering and help to integrate CBDC into 3rd party applications such as mobile banking apps of commercial banks. On this basis, companies can enrich central bank digital currencies with innovative and secure products and services.

"A CBDC must work for everyone, anywhere, at any time. Only in this way can it be a truly inclusive public digital currency. We are happy that the Banco Central do Brasil recognized the importance of dual offline payments saying that this topic faces even greater technological challenges than those present in the online applications of a CBDC", comments Raoul Herborg, Managing Director for the Central Bank Digital Currency unit at Giesecke+Devrient.

Further information

Video: [Digital Cash for Everyone, Anywhere, Anytime](#) ■

About Giesecke+Devrient

Giesecke+Devrient (G+D) is a global security technology group headquartered in Munich. As a partner to organizations with highest demands, G+D engineers trust and secures essential values with its solutions. The company's innovative technology protects physical and digital payments, the connectivity of people and machines, the identity of people and objects, as well as digital infrastructures and confidential data. G+D was founded in 1852. In the fiscal year 2020, the company generated a turnover of 2.31 billion euros with around 11,500 employees. G+D is represented by 74 subsidiaries and joint ventures in 32 countries. Further information: www.gi-de.com.