After launching its mainnet last year, Arbitrum has seen success as an Ethereum (ETH) layer-2 solution.

Arbitrum has focused on providing investors with a cheap, fast and scalable network, elements that Ethereum is still struggling with despite its Merge upgrade in September 2022.

As a result, developers have flocked to Arbitrum to build decentralised applications (dApps), and it is now ranked the seventh biggest blockchain by total value locked (TVL), according to DeFi Llama.

There is now speculation that Arbitrum will release its own ARBI cryptocurrency, but users are awaiting confirmation from the network.

Before exploring its potential cryptocurrency, let's first look at an Arbitrum definition.

What is Arbitrum?

The Arbitrum network is a layer-2 functionality, developed by the New York-based company Offchain Labs, which seeks to solve the congestion that the Ethereum network has been experiencing by improving how smart contracts are validated.

The platform leverages the security provided by the Ethereum mainnet but allows smart contracts to run on a separate layer to reduce congestion within the network.

This technique is called 'transaction rollups' (explained in some detail by the developers here) and consists of batches of transactions and records that are validated on the lower layer to then be moved to layer-1's mainnet – in this case, the Ethereum mainnet.

Arbitrum compensates nodes that actively validate the smart contracts powered by the Arbitrum chain (known as aggregators) with ETH and they are responsible for adding the blocks to the first layer – the Ethereum mainnet.

How does Arbitrum work?

The Arbitrum One ecosystem is a layer-2 mainnet which powers smart contracts that will later be validated by the Ethereum network (layer-1).

Fees charged by Arbitrum will be paid in ETH and the development team expects a reduction of around 50 times the usual fees paid per transaction on layer-1. This means that it should be cheaper to run Arbitrum smart contracts than to run them on the ETH mainnet directly.

On 29 May 2021, Arbitrum launched its Beta version and quickly attracted the interest of DeFi app developers, who are constantly seeking to reduce the fees that users incur for using the Ethereum network at peak times.

There is now a bustling ecosystem of dApps on Arbitrum, whether it's the decentralised exchange (DEX) GMX or liquidity management platform DeFiEdge.

Arbitrum has also seen a range of upgrades to its protocol. Its Arbitrum Nitro update went live in August 2022, which improved throughput and interoperability.