

Country	CBDC Project Name	Retail/ Wholesale	Structure	Status	Issued by Central Bank	Technology	Program Partner	Programmability	Interoperability
Australia	TBD	Wholesale	Token	Proof-of-Concept	Reserve Bank of Australia	DLT	ConsenSys Software	Yes	No
Australia	TBD	Retail	TBD	Research	Reserve Bank of Australia	DLT	ConsenSys Software	Yes	No
Austria	Delphi	Wholesale	Token	Research	Oesterreichische Nationalbank	DLT	N/A	N/A	N/A
Bahamas	Sand Dollar	Retail	Token	Launched	Central Bank of Bahamas	DLT	NZIA	Yes	Yes
Brazil	Digital Real	Retail	Token	Research	Central Bank of Brazil	DLT	R3 Corda	Yes	No
Canada	Jasper	Wholesale	Account	Pilot	Bank of Canada	DLT	R3 Corda	Yes	No
Canada	TBD	Retail	Token	Research	Bank of Canada	DLT	R3 Corda	Yes	No
China	e-CNY	Retail	Account	Pilot	People's Bank of China	Non-DLT	Feitian Technologies	Yes	Yes
Denmark	E-Kroner	Retail	Account & Token	Cancelled	Central Bank of Denmark	N/A	N/A	N/A	N/A
Europe	Stella	Wholesale	Token	Research	European Central Bank	DLT	R3 Corda	Yes	Yes
Europe	Digital Euro	Retail	Account & Token	Research	European Central Bank	DLT	R3 Corda	Yes	Yes
France	France CBDC	Wholesale	Token	Pilot	Banque de France	DLT	IZNES	Yes	No
France & Switzerland	Jura	Wholesale	Token	Research	Swiss National Bank, Bank of France and Bank for International Settlements	DLT	R3	Yes	Yes
France & Tunisia	France & Tunisia CBDC	Wholesale	Token	Pilot	Banque de France & Banque Centrale de Tunisie	N/A	Prosperus	N/A	N/A
Ghana	e-Cedi	Retail	TBD	Pilot	The Bank of Ghana	Non-DLT	Giesecke+Devrient (G+D)	TBD	TBD
Haiti	Gourde Digitale	Retail	TBD	Research	La Banque de la Republique d'Haiti	N/A	N/A	N/A	N/A
Hong Kong	LionRock	Wholesale	Token	Proof-of-Concept	Hong Kong Monetary Authority	DLT	R3 Corda, ConsenSys	Yes	Yes
Iceland	Rafkrona	Retail	Account & Token	Research	Central Bank of Iceland	DLT	N/A	N/A	N/A
India	TBD	Wholesale & Retail	Account & Token	Research	Reserve Bank of India	N/A	N/A	N/A	N/A
Indonesia	Digital Rupiah	Retail	Token	Research	Bank Indonesia	DLT	N/A	N/A	N/A
Japan	Digital Yen	Retail	Token	Proof-of-Concept	Bank of Japan	DLT	N/A	N/A	N/A
Japan	Stella	Wholesale	Token	Research	Bank of Japan	DLT	R3 Corda	Yes	Yes
Madagascar	e-Ariary	Retail	Token	Research	Banky Foiben'i Madagasikara	N/A	N/A	N/A	N/A
Marshall Island	Sov	Other	Token	Proof-of-Concept	Government, No central bank	DLT	Algorand	Yes	Yes
Mauritius	TBD	Retail	Token	Research	The Bank of Mauritius	N/A	N/A	N/A	N/A
Morocco	TBD	Retail	Token	Research	Bank-Al-Maghrib	N/A	N/A	N/A	N/A
New Zealand	TBD	Retail	Token	Research	Reserve Bank of New Zealand	N/A	N/A	N/A	N/A
Nigeria	e-Naira	Retail	Token	Pilot	Central Bank of Nigeria	N/A	Bitt Inc.	N/A	N/A
Norway	TBD	Retail	Token	Research	Norges Bank	N/A	N/A	N/A	N/A
Peru	TBD	Retail	Token	Research	Central Reserve Bank of Peru	DLT	N/A	N/A	N/A

Philippines	TBD	Retail	Token	Research	Rizal Commercial Banking Corporation	N/A	N/A	N/A	N/A
Russia	e-Ruble	Retail	Account	Research	Bank of Russia	N/A	N/A	N/A	N/A
Singapore	Dunbar	Wholesale	Token	Research	Reserve Bank of Australia, Bank Negara Malaysia, Monetary Authority of Singapore, and South African Reserve Bank	DLT	N/A	N/A	N/A
Singapore	Ubin	Wholesale	Token	Pilot	Monetary Authority of Singapore	DLT	R3 Corda	N/A	Yes
South Africa	Khokha	Wholesale	Token	Pilot	South African Reserve Bank	DLT	Quorum	Yes	No
South Africa	TBD	Retail	Token	Research	South African Reserve Bank	N/A	N/A	N/A	N/A
South Korea	TBD	Retail	TBD	Pilot	Bank of Korea	DLT	Ground X (Kakao)	N/A	N/A
Sweden	e-Krona	Retail	Account&Token	Proof-of-Concept	Sveriges Riksbank	DLT	R3 Corda	Yes	Yes
Switzerland	e-Franc	Retail	Token	Research	Swiss National Bank	DLT	R3 Corda	Yes	No
Switzerland	Project Helvetia	Wholesale	Account	Research	Swiss National Bank	DLT	R3 Corda	Yes	No
Thailand	Ithanon-LionRock	Wholesale	Token	Proof-of-Concept	Bank of Thailand	DLT	R3 Corda, ConsenSys	Yes	Yes
Turkey	Digital Lira	Retail	Token	Proof-of-Concept	Central Bank of the Republic of Turkey	N/A	N/A	N/A	No
UAE	Aber	Wholesale	Account	Pilot	United Arab Emirates Central Bank	DLT	IBM	No	No
UAE	TBD	Retail	Token	Research	United Arab Emirates Central Bank	DLT	N/A	N/A	N/A
Ukraine	e-hryvnia	Retail	Token	Proof-of-Concept	National Bank of Ukraine	DLT	Stellar	Yes	Yes
United Kingdom	RSCoin	Retail	N/A	Research	Bank of England	N/A	N/A	N/A	N/A
United States of America	TBD	Retail	Token	Research	US Federal Reserve	DLT	Project Hamilton	N/A	N/A
Uruguay	e-Peso	Retail	Token	Pilot	Central Bank of Uruguay	Non-DLT	Roberto Giori Company	Yes	No
Vietnam	TBD	Retail	Token	Research	State Bank of Vietnam	DLT	N/A	N/A	N/A

Source: CBDCTracker, Press Releases | Penser Analysis

