

Status of the e-krona project

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Agenda

- Introduction and background to the e-krona project
- Technical solution (PoC)
- The road ahead



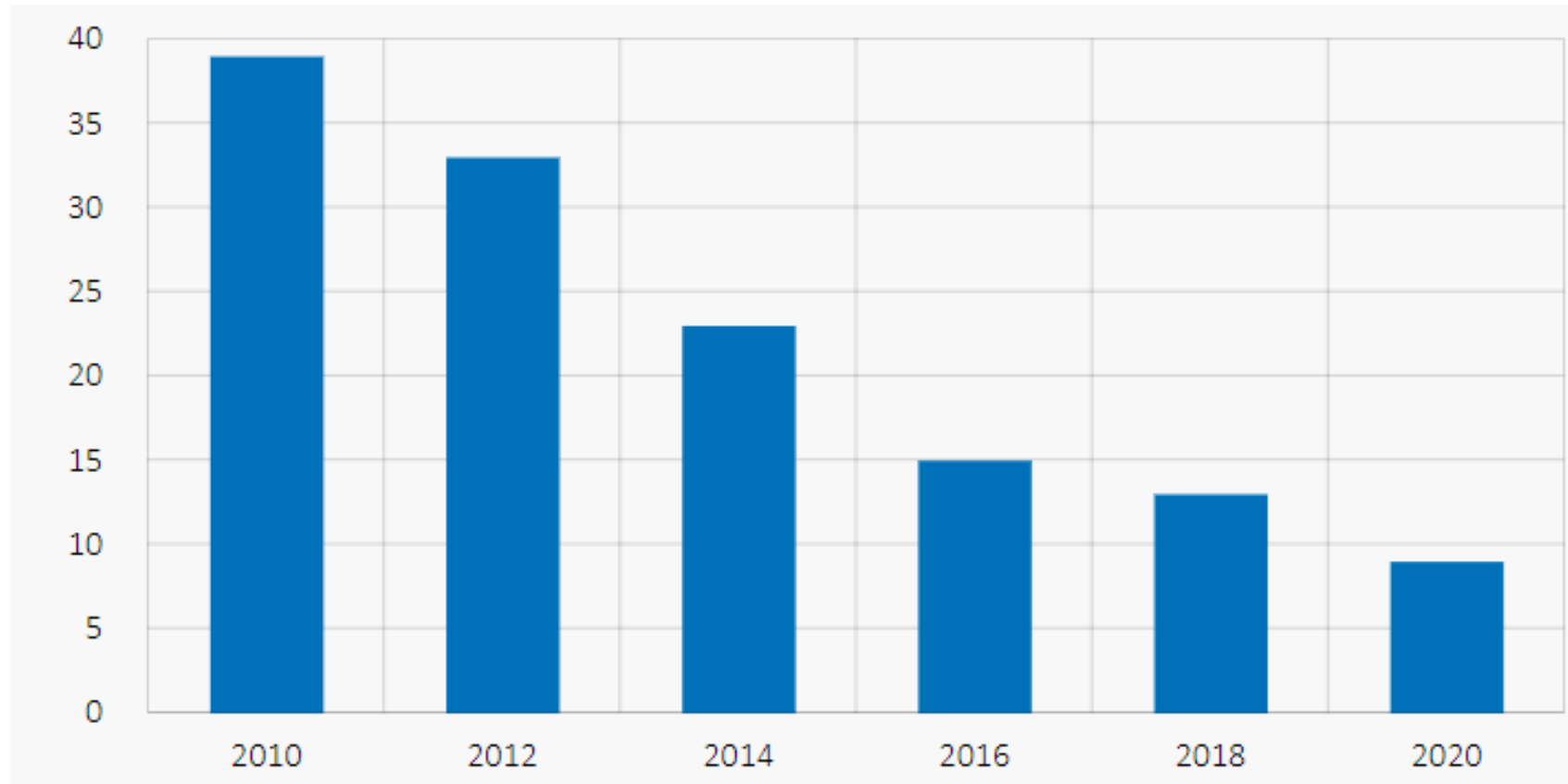
Introduction and background

More and more common to not accept cash in Sweden



Cash is rapidly being marginalised in Sweden

Percentage of people paying for their most recent purchase in cash.



E-krona project – develop and test technical solution and examine regulatory issues

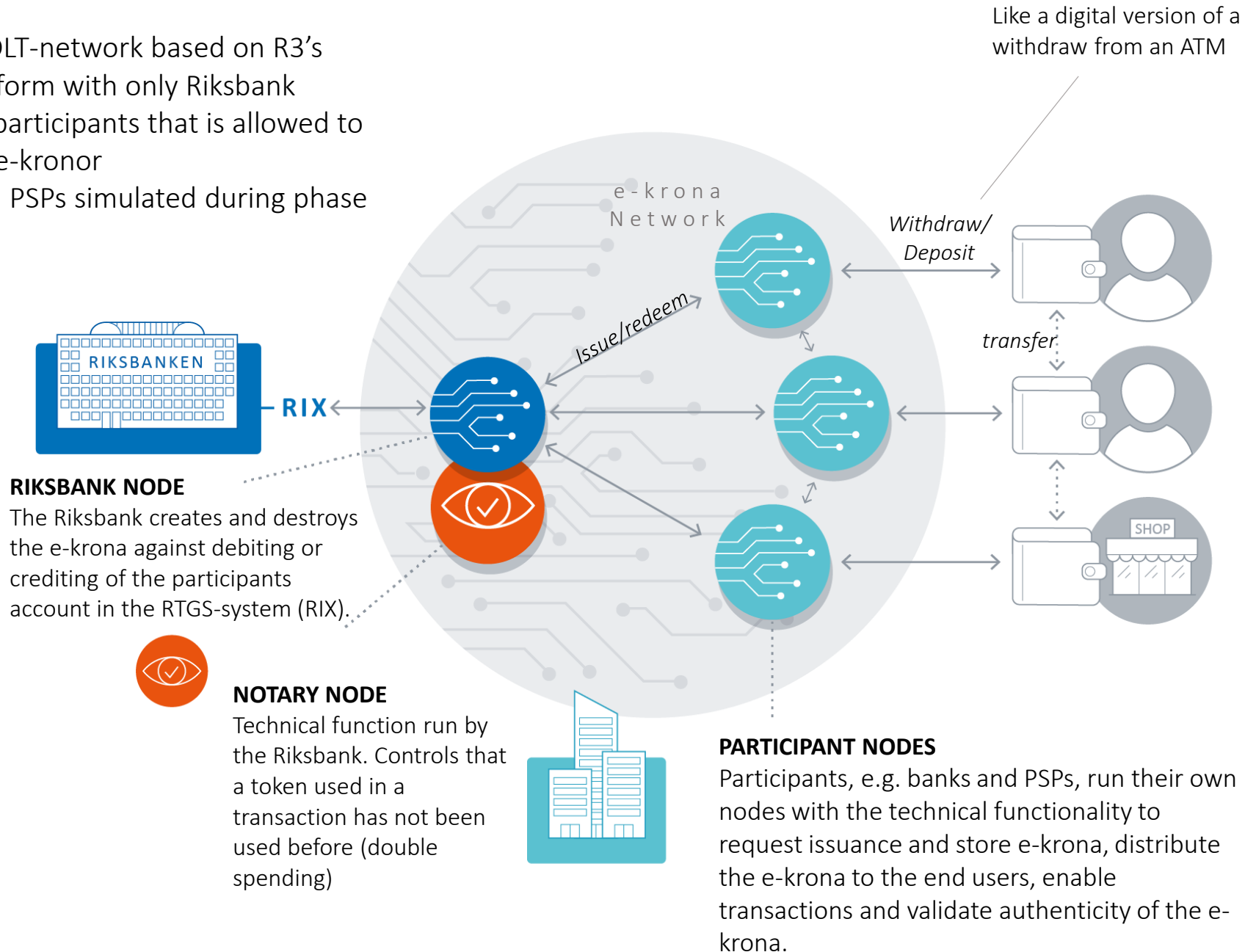
- The objective of the project is to increase the knowledge base
- Procurement of technical supplier 2019
- Phase 1 of the project Feb 2020 – Feb 2021
- Phase 2 of the project Feb 2021 – Feb 2022
- No decision on whether to issue an e-krona or on how the e-krona would be designed and which technology would be used



Technical solution (PoC)

Distribution of the e-krona

A private DLT-network based on R3's Corda platform with only Riksbank approved participants that is allowed to distribute e-kronor (banks and PSPs simulated during phase 1)



END USERS

Keep their own e-krona wallets with the ability to exchange commercial bank money to e-krona and initiate transactions with the e-krona. The digital wallet is connected to a payment instrument like a mobile app or card.

Some lessons learned, take aways so far and questions

- New technology that needs to be further investigated. Questions regarding performance and bank secrecy (information leakage) to name a few.....
- Storage of tokens: Technically possible to store locally in payment instrument. Gives some offline alternative.... But not full offline as cash! And it has other disadvantages like lost wallet etc....
- Financial stability: Interest rates and tokens are (technically) compatible. Negative interest rates for the end users are however problematic with local storage...
- A parallel network could enhance resilience on the payment market (depending on design)
- Is “digital cash” the objective? If so: how cash like is possible and also requested? What kind of e-krona would fit the Swedish market?
- Important question: What kind of legal framework would be suitable for an e-krona



Phase 2 of the technical pilot

- Half way in phase 2 of the pilot where we will continue to test the technical solutions possibilities and limitations...
- Some focus areas for the second stage of the pilot:
 - Involve real potential participants to test the integration of the network with "the world outside"
 - Implement local storage of tokens to test offline functionality and its limitations
 - Integrate the network with a POS-terminal
 - Further tests of performance and scaling in this token and DLT-network



The road ahead

E-krona project phase 2

1. Pilot project
Continued development
with Accenture

**2. Investigation and
communication**

**3. Preparations for
a possible new
procurement**

The road ahead for the e-krona

Parliamentary inquiry
~ nov 2022

Pilot project
Phase 1
~ Feb 2021

Pilot project
Phase 2
~ Feb 2022

Pilot project,
further extension?
~ Dec 2026

Preparation for the issuable e-krona?

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Questions?

<https://www.riksbank.se/en-gb/payments--cash/e-krona/>