Self Sovereign Identity

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TNO innovation for life

Oskar van Deventer
+31 651 914 918
Oskar.vandeventer@tno.nl

TNO AND SELF-SOVEREIGN IDENTITY

› Projects, participations

Dr. M. Oskar van Deventer

› Scientific Lead of Techruption Blockchain PPP, admintech
› Scientific coordinator of H2020 eSSIF-Lab
› Director of TNO Blockchain Lab: https://blockchain.tno.nl/laboratory/
› Economic Advisory Council of Sovrin, dominant identity blockchain

TNO (https://www.tno.nl/en/)

› 2600 employee applied R&D institute, founded by law in 1932, strong in digital infrastructures, interoperable data and cyber security
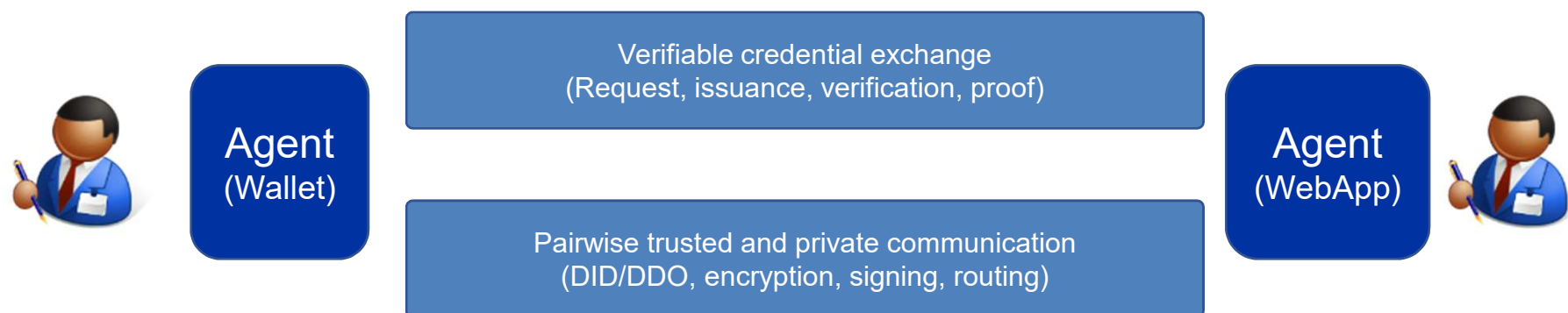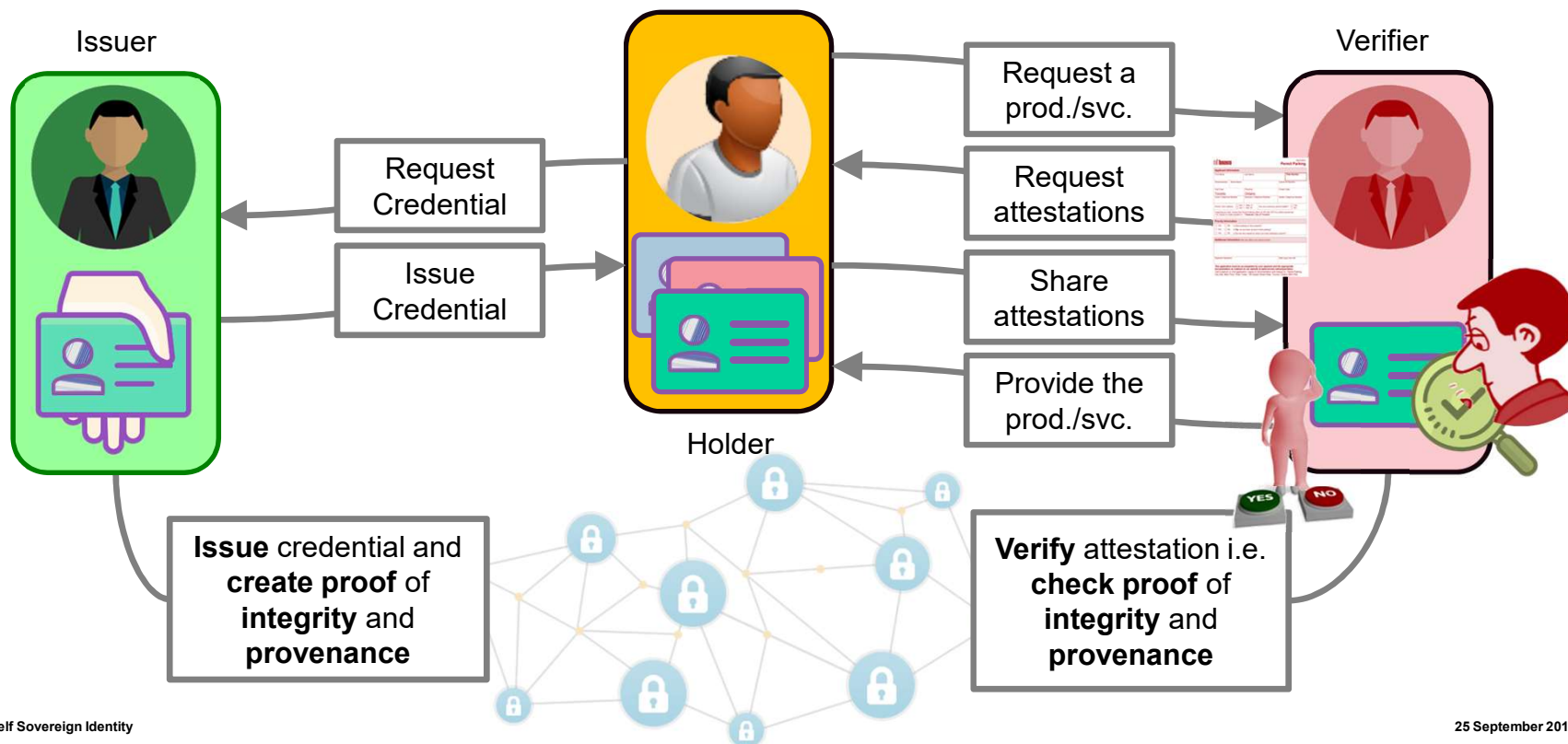
SSI: FILLING IN FORMS THE NEW WAY
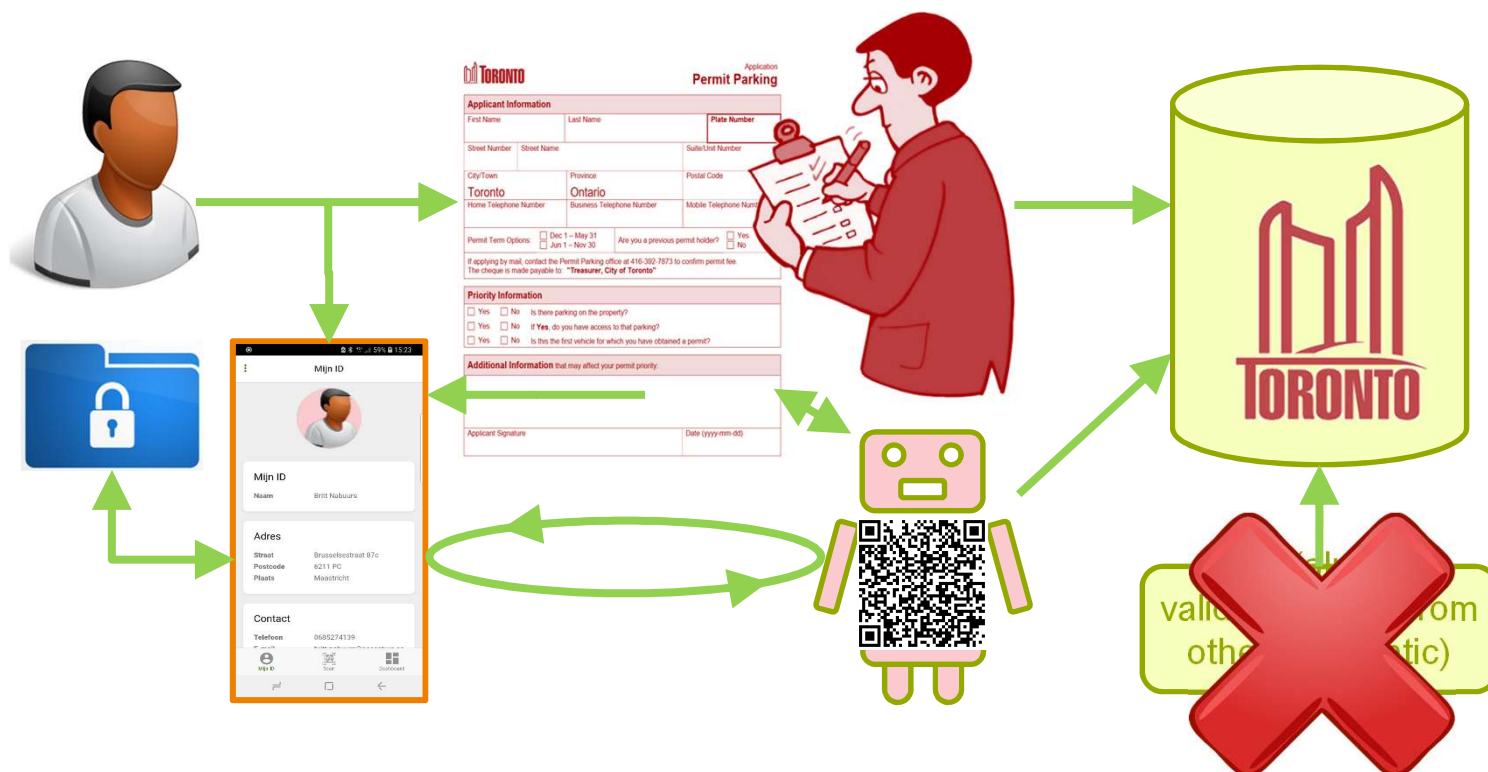
SSI: KEY INGREDIENTS

› Verifiable Credentials (VC):
  › Huge savings and convenience from automated requesting and verifying data
› Decentralized Identifier (DID):
  › Public Key Infrastructure without need for central Certificate Authorities

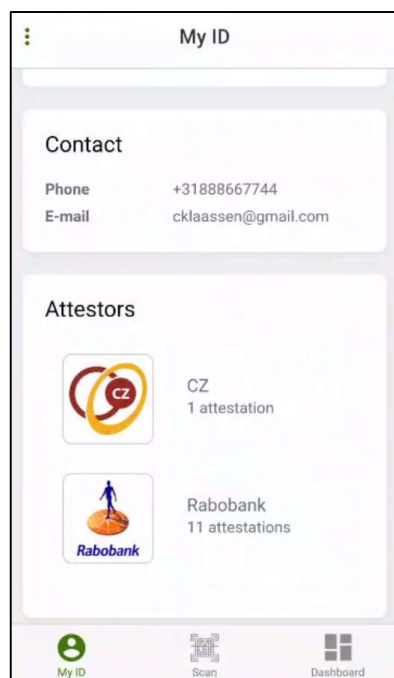› Read more: https://blockchain.tno.nl/blog/self-sovereign-identity-the-good-the-bad-and-the-ugly/

Agent (Wallet)

Verifiable credential exchange
(Request, issuance, verification, proof)

Pairwise trusted and private communication
(DID/DDO, encryption, signing, routing)

Agent (WebApp)

SSI: ISSUER, HOLDER, VERIFIER

Issuer

Verifier

Request Credential

Issue Credential

Holder

Request a prod./svc.

Request attestations

Share attestations

Provide the prod./svc.

Issue credential and **create proof** of **integrity** and **provenance**

Verify attestation i.e. **check proof** of **integrity** and **provenance**

ASK ME FOR A DEMO: MEDICINE PRESCRIPTION

› Patient gets recipe from doctor, goes to online pharmacy, pays from health insurance
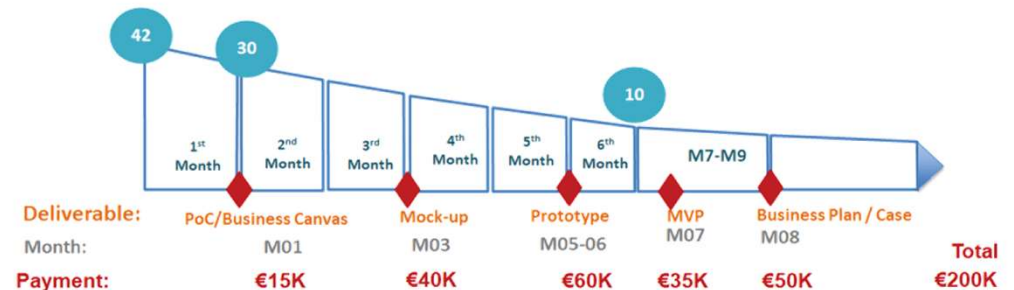
APPLY FOR AN eSSIF-Lab GRANT

> **H2020 cascaded funding**:
> grants for EU start-ups and SMEs for
> > SSI infra/technology/component development
> > commercial SSI application, business acceleration
> **First open call early 2020**

eSSIF–Lab Infrastructure Oriented Program (6 months)

Infrastructure Feasibility Development (1 single stage)

(6 months)

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	1st Month	2nd Month	3rd Month	4th Month	5th Month	6th Month		
Deliverable:	PoC Plan + Pre-financing					Feasibility Plan M06		
Month:	M01							Total
Payment:	€42K					€28K		€70K

eSSIF–Lab Business Oriented Program (9 months) — **Go to Market**

S1: Hackathon & PoC	S2: Full functionality	S3: Customer / Use-case integration	Fundraising & Brokerage
(1 month)	(5 months)	(3 months)	

42 30 10

	1st Month	2nd Month	3rd Month	4th Month	5th Month	6th Month	M7-M9		
Deliverable:	PoC/Business Canvas		Mock-up		Prototype		MVP	Business Plan / Case	
Month:	M01		M03		M05-06		M07	M08	Total
Payment:	€15K		€40K		€60K		€35K	€50K	€200K

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› commercial SSI application, business acceleration
• first open call early 2020

THANK YOU FOR YOUR ATTENTION

Take a look:
TNO.NL/TNO-INSIGHTS