



Transparent and anonymous voting on blockchain

Powered by:



Voting is at the heart of every democratic system

The future is clearly in e-voting, but existing systems are not without problems



The screenshot shows a news article from the Swiss Post website. The header features the Swiss Post logo on the left and a 'Menu' button on the right. The main headline reads 'Swiss Post temporarily suspends its e-voting system' with a date of '29.3.2019'. Below the headline are three category tags: 'Security', 'Cantons', and 'Public Intrusion Test (PIT)'. The article text states that a public intrusion test ordered by the Confederation and the cantons is complete, but the test revealed critical errors in the source code of the electronic ballot box. Due to the high priority of vote integrity, Swiss Post is taking corrective action, including reviewing the code with independent experts, and will suspend the e-voting system for the May 19 elections.

SWISS POST  Menu 

Swiss Post temporarily suspends its e-voting system

29.3.2019

[Security](#) [Cantons](#) [Public Intrusion Test \(PIT\)](#)

The public intrusion test ordered by the Confederation and the cantons on Swiss Post's new e-voting system is complete. Although the electronic ballot box could not be hacked, feedback on the published source code reveals critical errors. Since the integrity of votes and elections is a top priority, Swiss Post is taking action. It will correct the source code and have it reviewed again by independent experts. It will therefore not provide its e-voting system to the cantons for the votes of 19 May.



**A revolutionary e-voting system
without trusted authority offering**

complete transparency

AND

total anonymity



Transparency

**All poll data is published on the itugen blockchain,
constituting a public and inalterable record**

+ list of all voters

+ all ballots

Transparency

Anyone can verify that a ballot is valid

(verification of zero-knowledge proof attached to ballot)

Transparency

Multiple ballots by the same voter are easily identified:

double voting is not possible

Transparency

After polling ends:

**the content of all votes becomes publicly visible
and anyone can verify the result**

(no need for a trusted authority)

Anonymity

Voter identity remains secret forever

(using quantum-resistant cryptography)

blockchain

zero-knowledge proofs

quantum-resistance

cryptography



complete transparency + total anonymity

<https://www.itugen.com>



itugen is backed by the team behind Sikoba Research.

Sikoba Research conducts fundamental and applied research in the areas of cryptography, blockchain and distributed systems.

We are the developers of the **isekai** zero knowledge framework.



Zero-knowledge framework supporting:

**libsnark (Groth16 and BCTV14a), dalek
(Bulletproofs) and libiop (Aurora and Ligerio)**

a wide subset of C / C++ code



Alex Kampa

Director



Guillaume Drevon

CTO



Nimisha Walji, PhD

COO



Vincenzo Iovino, PhD

Cryptographer



Dmitry Khovratovich, PhD

Cryptography Advisor



Margareta Reshetar

Community Relations



Juan Caballero, PhD

Identity Advisor



Business model and clients

- Poll organisers pay all fees, voters participate for free
- Initial focus on blockchain and ERC20 token governance

Itugen Product Roadmap

- Technology stack: ready now!
- Technical implementation paper: published December 2019 (*)
- Coding started: January 2020
- POC target: March-April 2020
- MVP target (assuming funding): 3 Q 2020

* Accepted for presentation at ITASEC20 (www.itasec.it)



We're looking for:

- Investors
- Partners
- Organisations that need e-voting

Technology Partner



Itugen's blockchain layer will be built using
Fantom's Lachesis consensus engine

blockchain

zero-knowledge proofs

quantum-resistance

cryptography



complete transparency + total anonymity

<https://www.itugen.com>

Contacts:

Alex Kampa Director ak@sikoba.com +352 691 46 85 81

Guillaume Drevon CTO gd@sikoba.com +352 691 15 22 15

Links:

[Itugen website](#)

[Sikoba Research](#)

[Isekai 1.0 announcement](#)

