NEXT GENERATION INTERNET

ESSIF-LAB and DIF interoperability

DIF Interoperability WG call. 9th December 2020

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Agenda

- o eSSIF-Lab: Use SSI to facilitate electronic transactions
- o eSSIF-Lab: Infrastructure-oriented open call closes 4 Jan 2021, grants up to 155 k€
- o eSSIF-Lab and DIF: orchestrating interoperability

- o Discussion: advice from DIF experts to eSSIF-Lab

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eSSIF-Lab: Use SSI to facilitate electronic transactions

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eSSIF-Lab: Build Interoperable Infrastructure to Facilitate Electronic Transactions

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Imagine: everything that anyone knows about you …
is in *your* vault …

digital

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Vision: assist transaction parties electronically

Form is 'clean' i.e. data is valid and business decision can be made
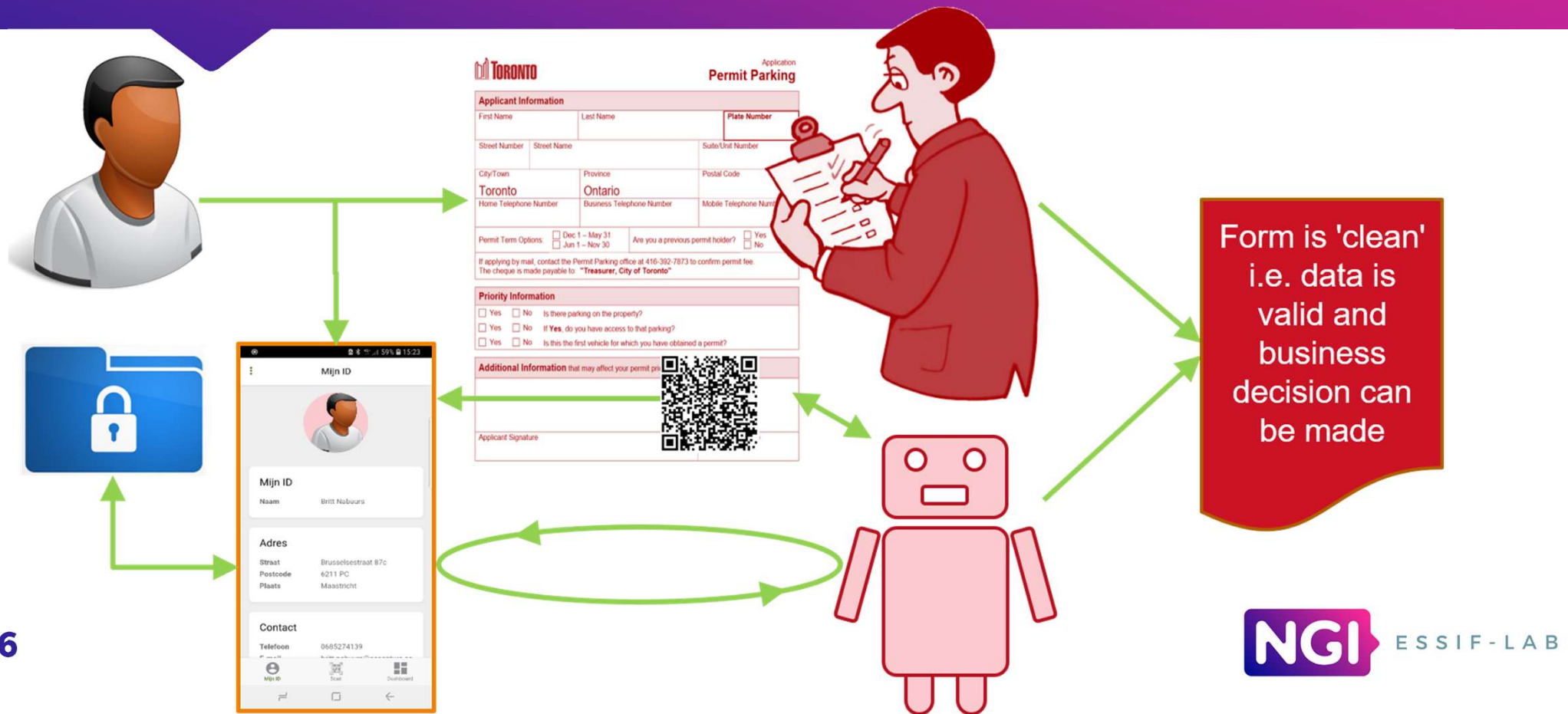
Benefits

... for Individuals:

- **Inclusivity:** you no longer need to be well-educated in order to fill in forms.

  - **Speed:**
    - Collect data electronically → speed.
    - No need to physically go places to collect data.

  - **Ease**
    - Minimize typing data.
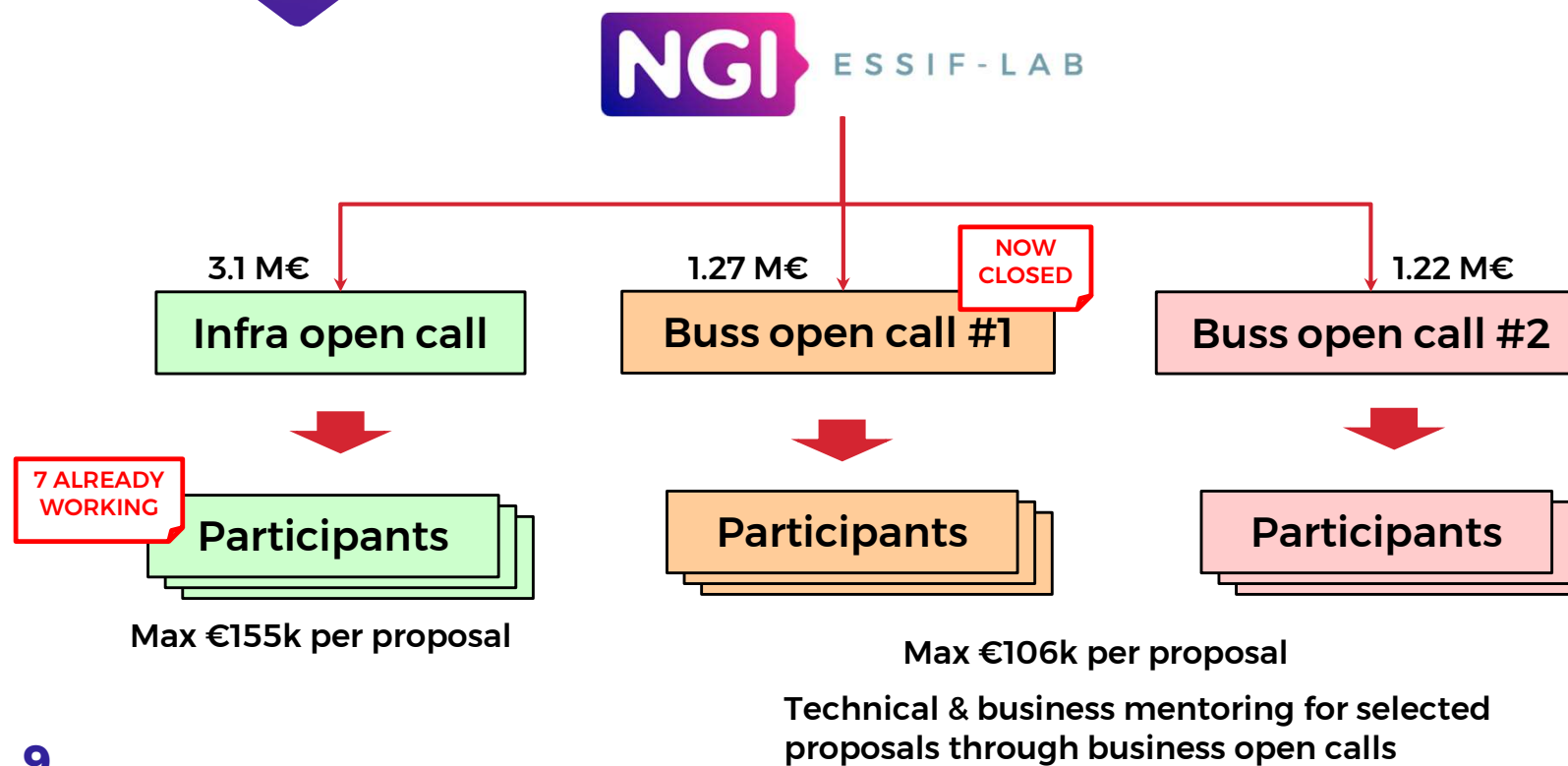   - No need to upload PDFs.
    - Minimize frustration.

for Organizations:

- **They get quality data**, i.e.
  - It means what it is supposed to mean;
  - Data is verified by party that the organization itself trusts.

- **Validation of data is easy**:
  - Cryptographic check on provenance and data integrity;
  - Electronic check op actuality.

- **Higher customer/citizen satisfaction → higher filling in and success rates** resulting from faster decision making and because users do not give up any more.

- **Do away with IT-links** that supply data that can now be reliably and trustworthily be supplied by the users.

- **Support for GDPR** e.g. digitally providing purpose and other meta data helps enforce the right of transparent information, access, data portability, restriction of processing, etc.).

- **New business opportunities** because many more kinds of data can become available.

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eSSIF-Lab: Infrastructure-oriented open call closes 4 Jan 2021, grants up to 155 k€

OPEN CALLS OVERVIEW

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3.1 M€

Infra open call

1.27 M€

NOW CLOSED

Buss open call #1

1.22 M€

Buss open call #2

7 ALREADY WORKING

Participants

Participants

Participants

Max €155k per proposal

Max €106k per proposal

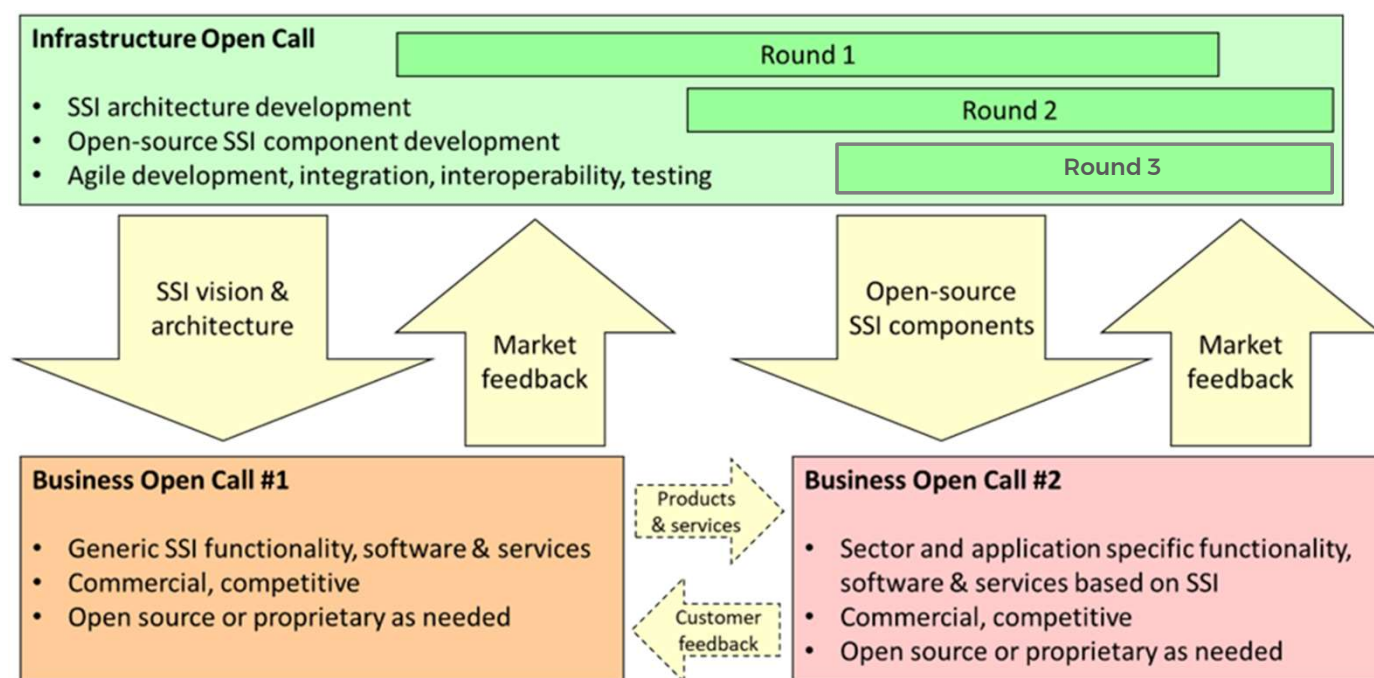Technical & business mentoring for selected proposals through business open calls

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RELATION AMONG OPEN CALLS

All open calls are related among them because eSSIF-Lab aims at building an ecosystem

WHAT ARE WE LOOKING FOR?

We aim to support the development and implementation of *open source SSI components* **to the eSSIF-Lab basic infrastructure**.

I.e. components to populate eSSIF-Lab Framework as to enable participants selected under the Business-oriented Open Calls of eSSIF-Lab to easily use the infrastructural components.

Solutions must:
- Be scalable and interoperable
- Use agile development
- Be within the SSI concept

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Inspiration for Proposal Topics

Tech Infra Oriented topics:
- o Secure Credential Storage (wallet/hubs)
- o SSI phone Apps and/or browser add-ons that work with different kinds of credentials (e.g. VCs, ABCs, ...)
- o Web server proxies that implement, or connect with components for the various SSI roles
- o Revocation service that allows verifier to check for revocation of a credential any time after having received it
- o 'On the fly' requesting the issuance of a credential if it is asked for, but missing in the wallet
- o Cryptographically enforceable issuer policies

Tech Infra Oriented topics
- o Countermeasures against SSI coercion
- o Tooling for the governance of local assurance communities, which issuers to trust for which categories of credentials
- o Solutions that aid the integration of multiple SSI technologies
- o Solutions that aid the interoperability between different SSI components
- o ...

SURPRISE US

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eSSIF-Lab and DIF: orchestrating interoperability

ESSIF-LAB

eSSIF-Lab and DIF: orchestrating interoperability

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TRUST Over IP FOUNDATION

DIF

HYPERLEDGER ARIES

W3C Credentials Community Group

W3C DID

ISO International Organization for Standardization

(Funding and support for ...)
... commercial and open-source
implementations, that ...

..., that are available for use,
and that work together in ...

... in an efficient and market-
coordinated way towards ...

... towards a thriving European SSI business ecosystem

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eSSIF-Lab: building SSI ecosystem together
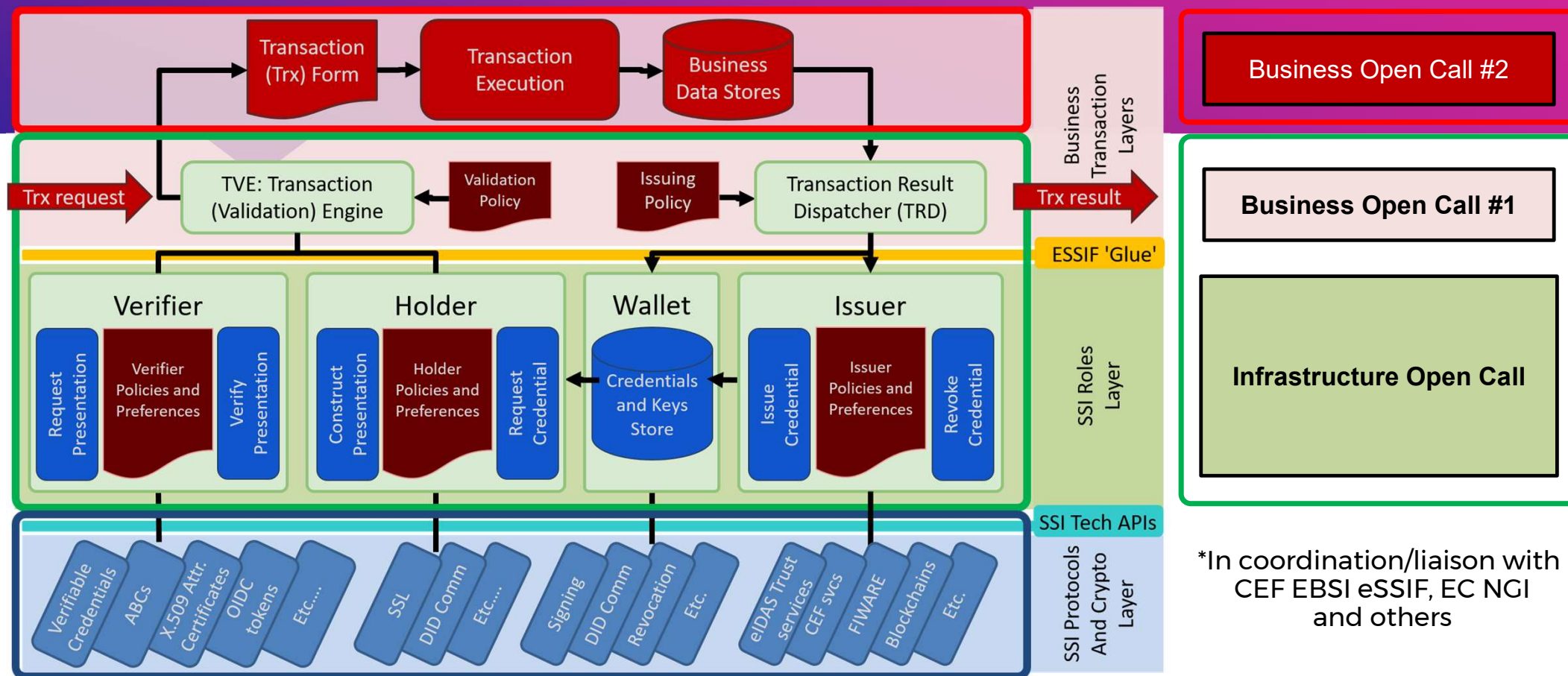
Current "infrastructure" subgrantees

BRIDGE by SICPA Spain S.L.U.	BRIDGE for ledger-agnostic interoperable issuance and verification of W3C verifiable credentials.	SICPA
Capability Based Authorization System by Jolocom	A capabilities-based authorization system, utilizing DIDs, Verifiable Credentials, Verifiable Presentations, etc.	JOLOCOM
eSSIF- TRAIN by Fraunhofer-Gesellschaft	Trust Management Infrastructure Component.	Fraunhofer IAO
Evernym Open Sourcing Project by Evernym UK	Open sourcing Evernym's credential exchange platform.	evernym
Self-Sovereign IDentity Online by UBICUA	Online password less authentication based on SSI and FIDO2.	UBICUA Digital Ecosystems
SSI eIDAS Bridge by Validated ID, S.L.	An eIDAS bridge, which is a component that proposes to enhance the legal certainty of any class of verifiable credentials.	Validated ID Always be yourself
Verifiable Credential Authority by NYM Srl	A DLT/blockchain independent platform to Issue and Verify certified attributes and claims, under different formats, and for any SSI system.	NYM

See also
https://essif-lab.eu/meet-the-essif-labs-ecosystem-the-1st-business-oriented-programme-participants/
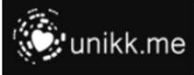and
https://essif-lab.eu/meet-the-essif-labs-ecosystem-the-infrastructure-development-instrument-first-winners/

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Current "business" subgrantees

CommercioKYC by Commerc.io	Easy KYC with Self-Sovereign Identity.	
Universal DID SaaS by Danube Tech	Building a hosted service that allows developers to easily work with Decentralized Identifiers (DIDs), without having to set up their own infrastructure.	DANUBE TECH GMBH
SSI-enabled "Contractual Event" Passport by Domi Labs	Enabling businesses to integrate SSI into their contractual record management processes.	domi
e-Origin Wallet by e-Origin	Digital wallet of verifiable credentials for the products' origin.	
Gataca Connect by Gataca España	Trusted Single Sign On for a human-centric Internet.	GATACA
SSI4DTM by JoinYourBit	Self-Sovereign Identity for Digital Transaction Management: a Digital Transaction Management platform to execute any cross-border transactions: NDAs, contracts, bids, etc.	JOIN YOUR BIT.com
Universal Backup Service (UBS) for SSI Agents by Jolocom	A vendor-neutral, plug-and-play component for equipping SSI Agents with a service to generate interoperable backups of end user data.	JOLOCOM
SSI-as-a-Service by Netis	Simplifying SSI integration and adoption.	netis
Gaya by NYM srl	Supports public notaries to remotely incorporate Limited Liability Company, providing all the tools they need to apply digital transformation to their business.	NYM

NYM Credentials for Self-Sovereign Identity by Nym Technologies	A bulletin-board and search system for privacy-enhanced services	NYM
Digital ID and signatures by Off-Blocks	Onboarding businesses and organizations in a self-sovereign world through user-friendly and low-cost control over trusted digital identities, verified credentials and digital signatures.	OFF-BLOCKS
IRIS – Discourse Community Credentials by Resonate Beyond Streaming	A Discourse plugin that allows SIOP OIDC login and community-friendly transparent recognition, award and governance of verifiable credentials as user-friendly 'badges'.	resonate
Dynamic Data Sharing Hub with Consent Flow by The Human Colossus Foundation	Brings SSI benefits to the wider economy by enabling a privacy preserving full data life cycle including consent.	HUMAN COLOSSUS FOUNDATION
Trusted Digital Assistant – a data operator solution by unikk.me	Bringing the fundamental right to an autonomous identity to every person by enabling trusted parties to act as a 'trusted digital assistant' in catering.	unikk.me
User-friendly Management Interface for Verifier Policies by Verifiable Credentials	Verifiable credentials for reviewers of scientific publishing and research funding proposals.	Verifiable Credentials Ltd
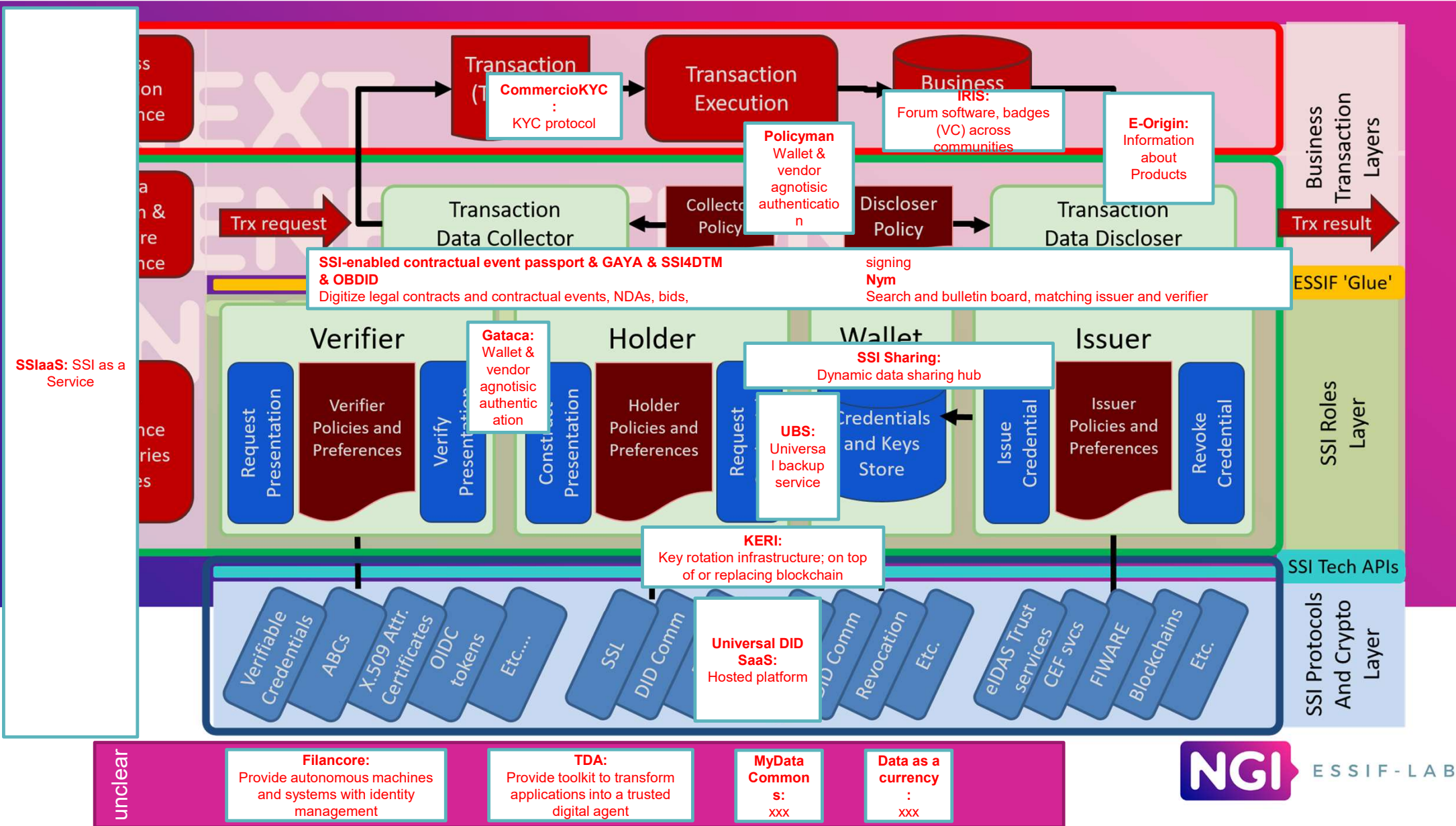
eSSIF-Lab interop projects

Verifier Open Protocol

eIDAS Bridge

Aries Wallet Protocols

Universal Wallet Backup

... ...

... interop

See https://gitlab.grnet.gr/essif-lab/essif-lab/-/tree/master/business-open-call-1, and https://gitlab.grnet.gr/essif-lab/essif-lab/-/tree/master/infrastructure-call
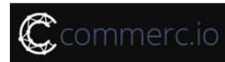
eSSIF-Lab and DIF: where can we help each other

Funding and support for implementation, interop testing and standards development (and buss dev)

but lacking

- standing organisation and long-term continuity
- methodologies and systems for interop
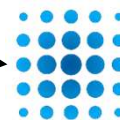- home for developed open source code

Standing organisations with open source library development, interop profile development & publication, interop test suites, and interop event organisation

Discussion: advice from DIF experts to eSSIF-Lab

In conclusion
- o eSSIF-Lab: Use SSI to facilitate electronic transactions
- o eSSIF-Lab: Infrastructure-oriented open call closes 4 Jan 2021, grants up to 155 k€
- o eSSIF-Lab: drive for open source, interoperability, standards and market

Seeking you advice
- o What has DIF to offer to eSSIF-Lab (and vice verse)?
- o How to ToIP, DIF and Aries relate? Their relevance to eSSIF-Lab?
- o What aspects of eSSIF-Lab fit best with DIF? Or ToIP, or Aries?

THANK YOU!

WEBSITE: ESSIF-LAB.EU

info@essif -lab.eu

eSSIF-Lab FRAMEWORK:

https://essif-lab.pages.grnet.gr/framework

Extra slides

eSSIF-Lab logos

See https://gitlab.grnet.gr/essif-lab/essif-lab/-/tree/master/business-open-call-1,
and https://gitlab.grnet.gr/essif-lab/essif-lab/-/tree/master/infrastructure-call

REQUIREMENTS and EVALUATION

Proposals Submission 🔲 FundingBox · Beneficiaries submit an online form

mail

Rejection

Eligibility & Quality Check · based on eligibility and quality criteria

mail

Selection

Experts Evaluation ◄···· **Experts Panel**
(up to 3 independent experts per proposal)

Consensus Meeting ◄···· **Selection Committee**
(Steering Committee + 3 Experts .)

mail

FSTP Agreement Signature (SGA)

Pre-financing (PoC in M1)

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ELIGIBILITY CRITERIA

- Development and testing of SSI open source components which meet SSI Concept and contribute to eSSIF-Lab vision and architecture.

- Legally established or resident in eligible countries (i.e. EU Member States, their OTC, H2020 Associated Countries)

- Submission before deadline (04/01/2021, at 13:00 -Brussels time)

- Language: English

- No conflict of interest & not in EU exclusion criteria

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QUALITY CRITERIA

MINIMUM QUALITY CRITERIA

1. "Have a relevant past performance in developing and running identity solution or related components"

2. "Embracement of broad vision of eSSIF-Lab interoperable self-sovereign identity"

3. "Willingness to interact with other eSSIF-Lab participants to further concretize eSSIF-Lab vision"

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MAIN FEATURES

Infrastructure-oriented call

🎯 European innovators

🖥️ Open source SSI components

🐷 Up to €155K (9 months projects)
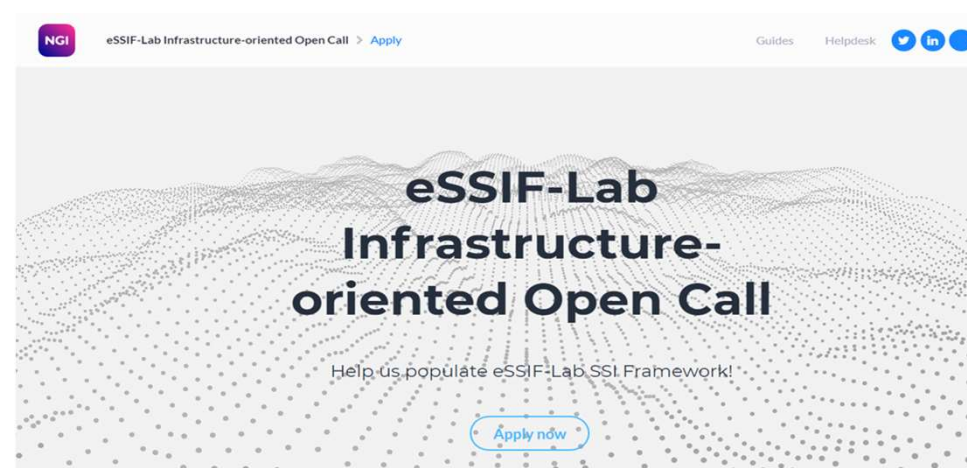
NEXT DEADLINE: 04th January 2021 at 13:00 (Brussels Local Time)

Online form   https://essif-lab-infrastructure-oriented.fundingbox.com/

Helpdesk https://spaces.fundingbox.com/spaces/ngi-community-essif-lab-q-a

GUIDANCE DOCUMENTS

https://essif-lab-infrastructure-oriented.fundingbox.com/pages/Guides