

# 5th JPEG NFT and Fake Media Workshop

## eID solutions in Self- Sovereign Identity (SSI) ecosystems

*How to gain confidence in a  
digital world*

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Identity Security Solutions Director  
Company: SICPA SA  
Date: June 30, 2022

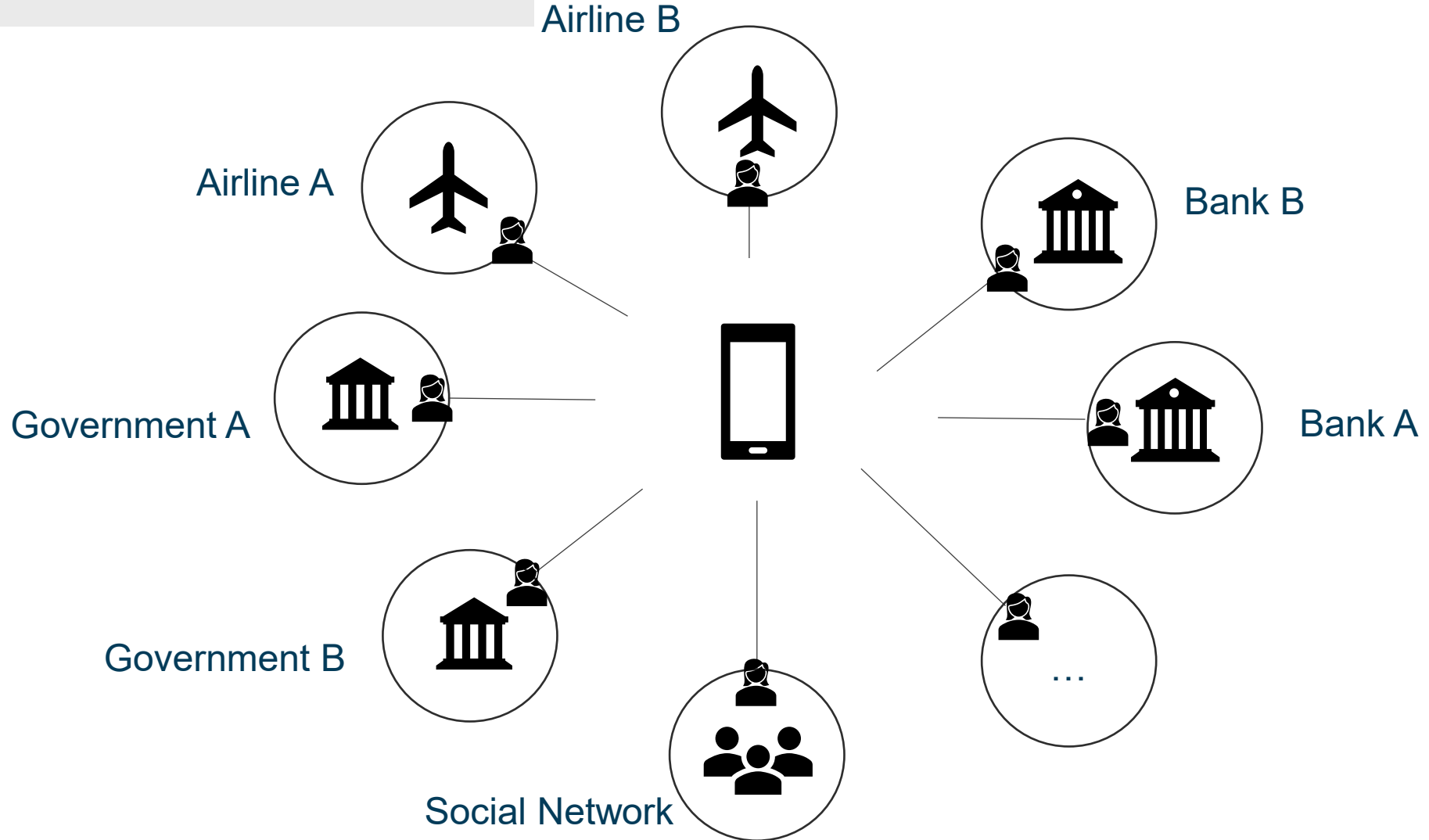


**Digital Identity**

INCLUSIVE DIGITAL IDENTITY,  
AN IDENTITY FOR ALL



# Is the digitalization a potential solution?





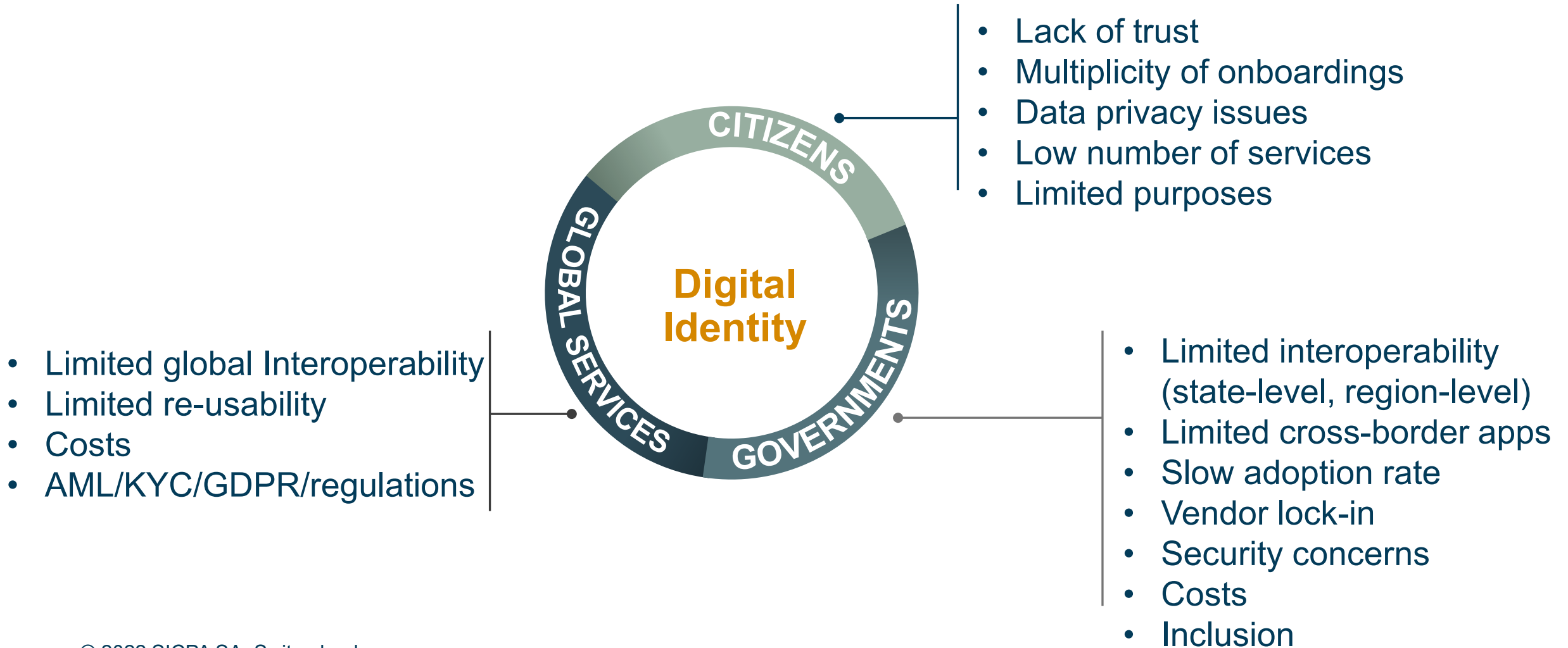


# The Challenges at Stake

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# Major issues with current implementations





A lighthouse with a red and white striped tower is shown from a low angle, looking up towards the top. A bright beam of light emanates from the top of the lighthouse, casting a long, straight path of light across a dark, blue, and purple background. The beam of light is the central focus, creating a sense of direction and guidance. The background has a subtle, wavy pattern, suggesting a night sky or a deep sea.

The most pressing market need

*Ensuring*  
***governments***  
*to remain*  
***the root of trust***  
*when facilitating*  
***digital identity systems***  
*that are global by nature for the citizen.*



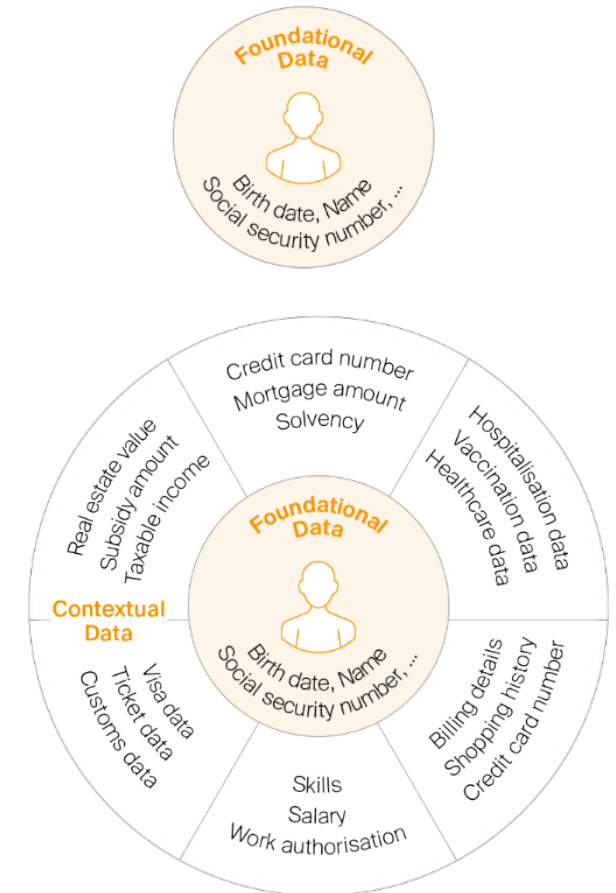
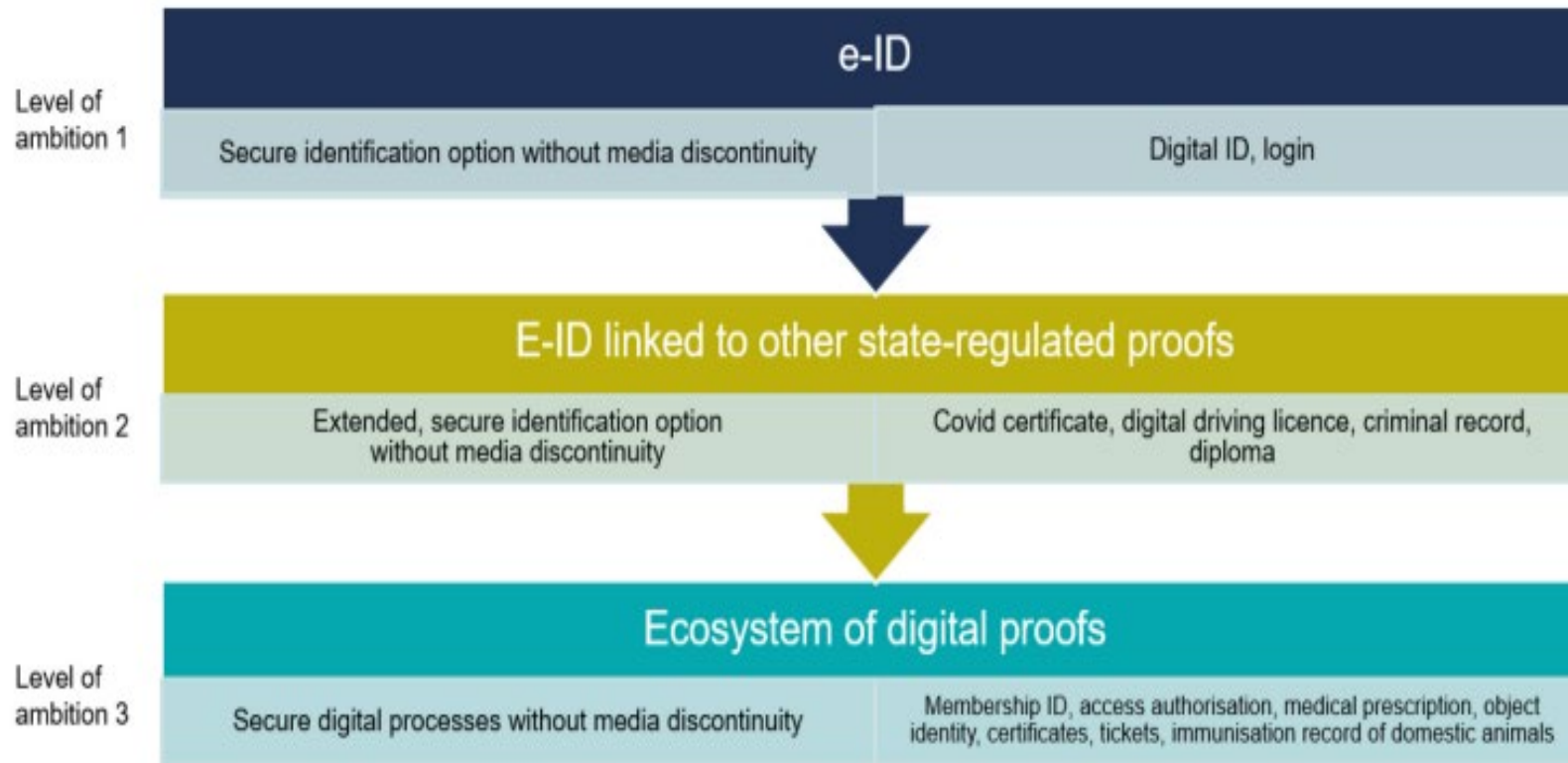


# A better approach

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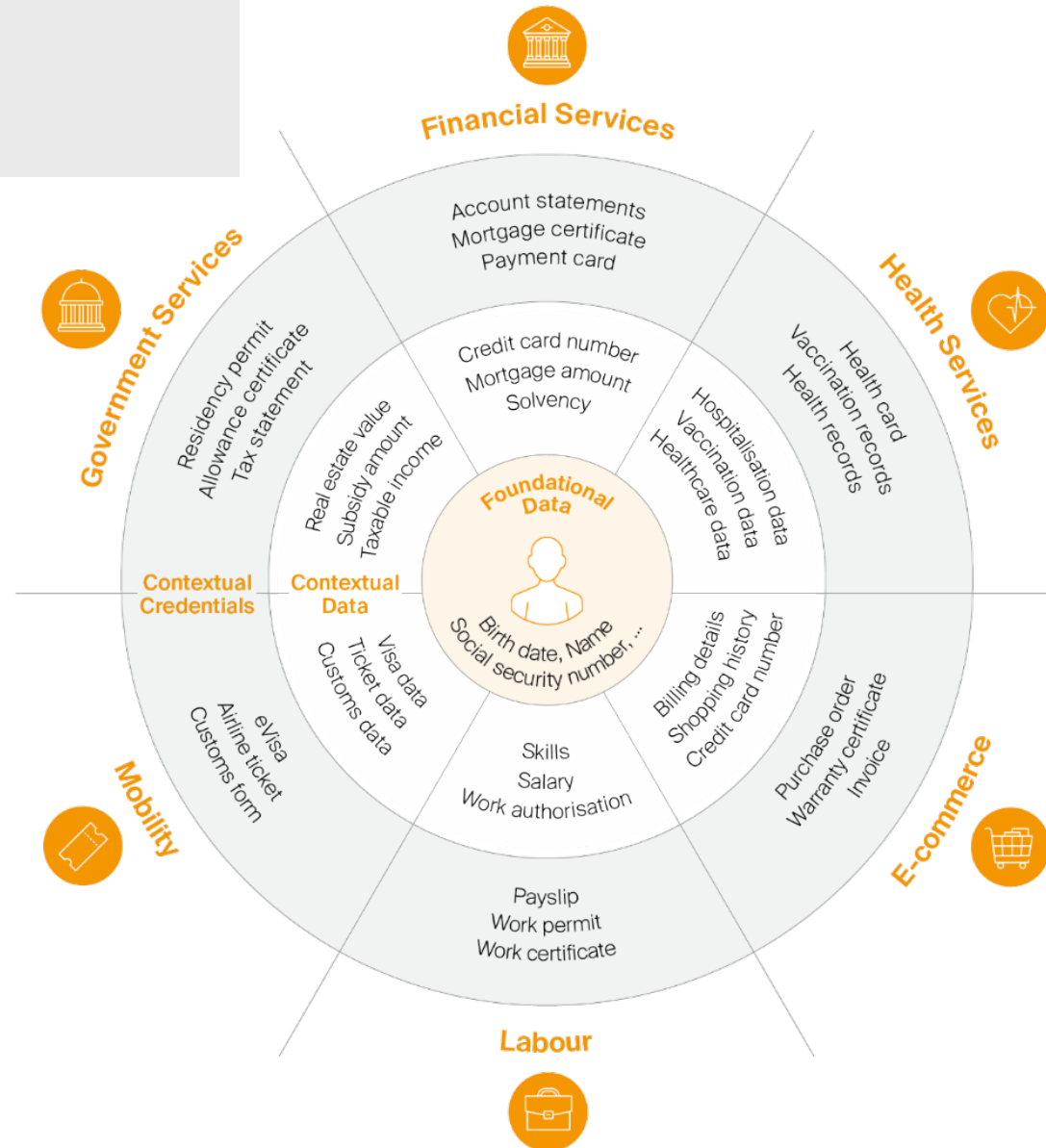
# Design Levels of Ambitions....



Ref.: Federal Department of Justice and Police – Discussion paper on the target vision for an e-ID - 2021



# ...To better serve a global eco-system

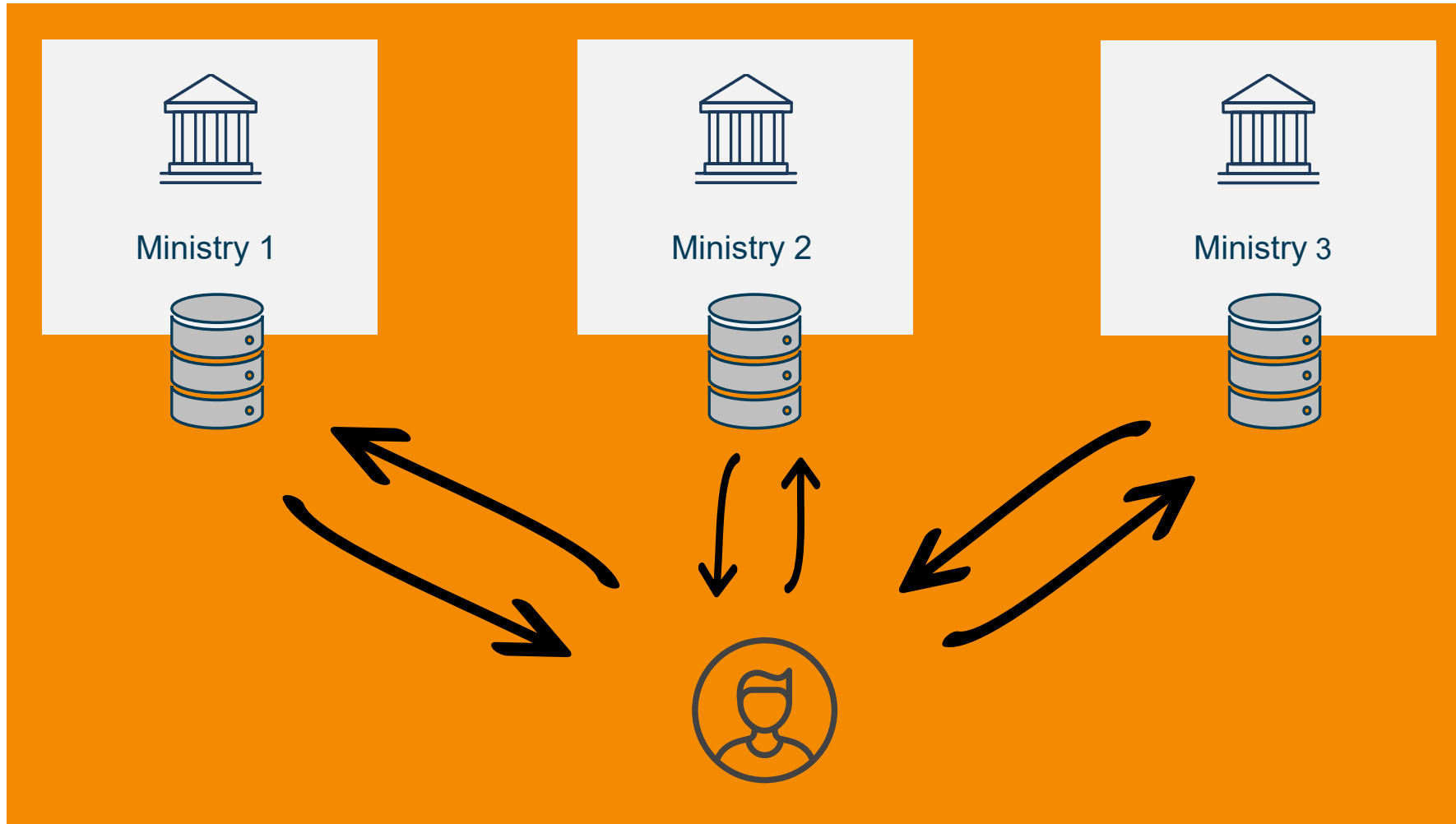




## ...Via a world of **trusted reusable credentials**



# Using the decentralization approach



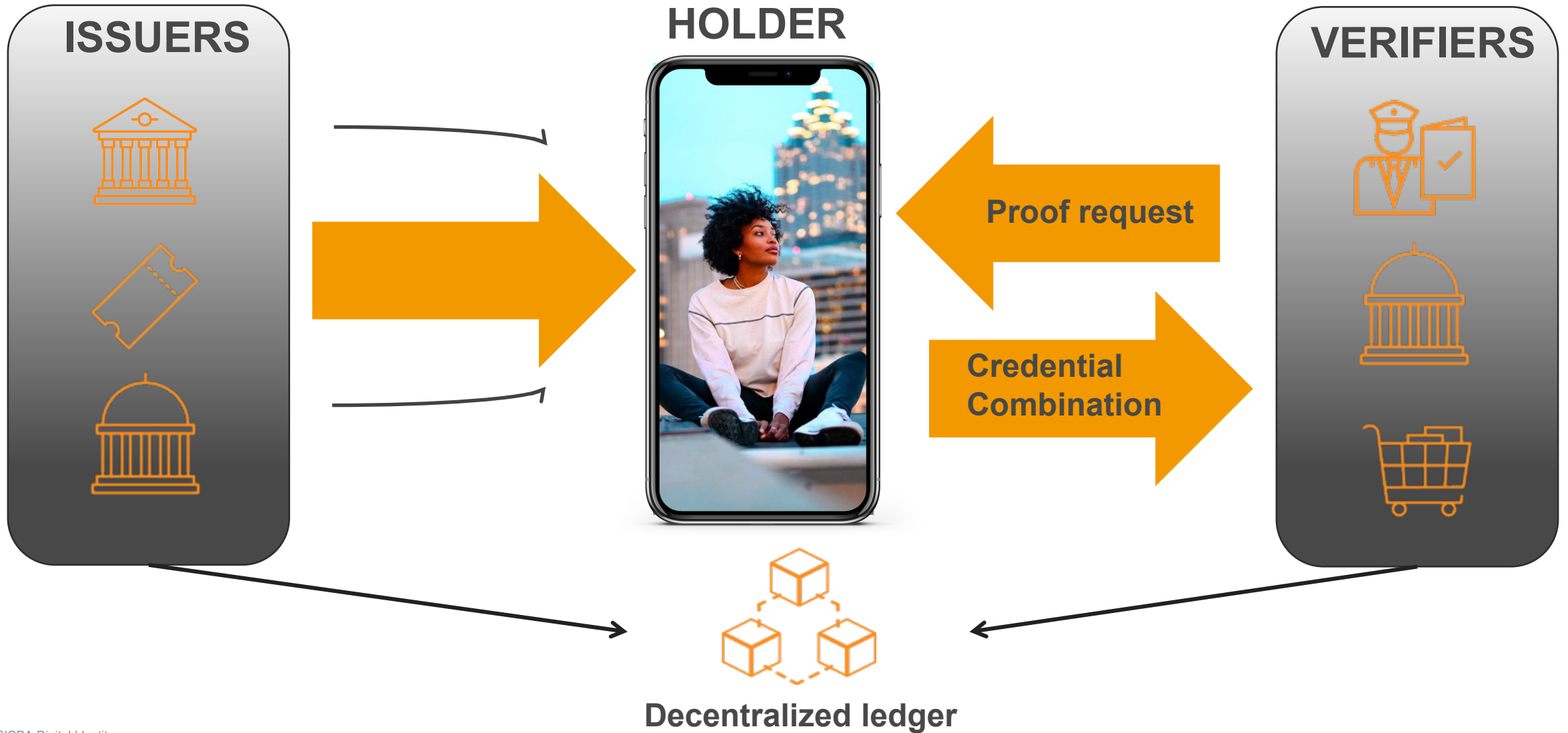


# Role of the government in the SSI model

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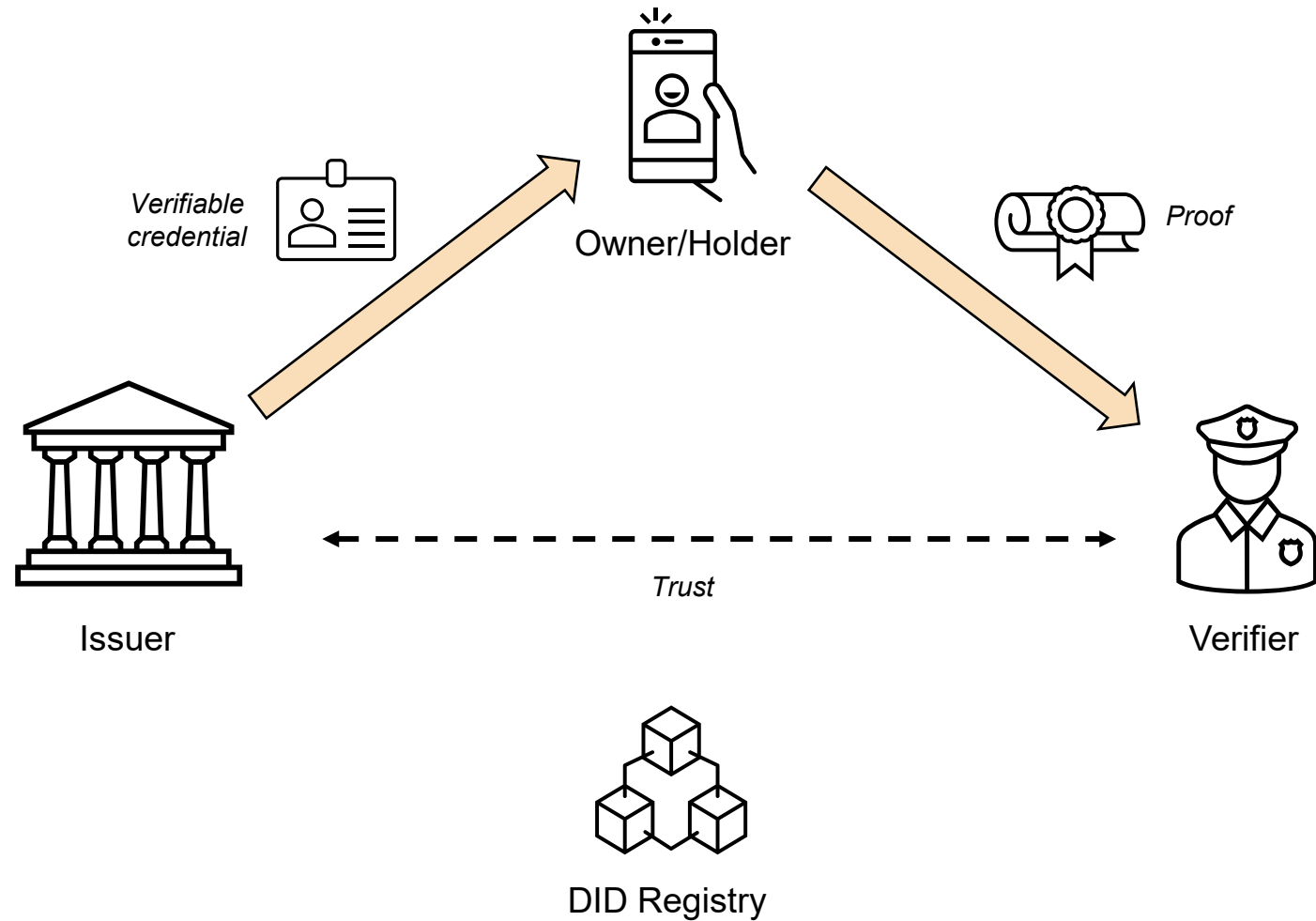


# SSI and Re-usability of Credentials





# Verifiable Credential Data Model



# Role of the Government

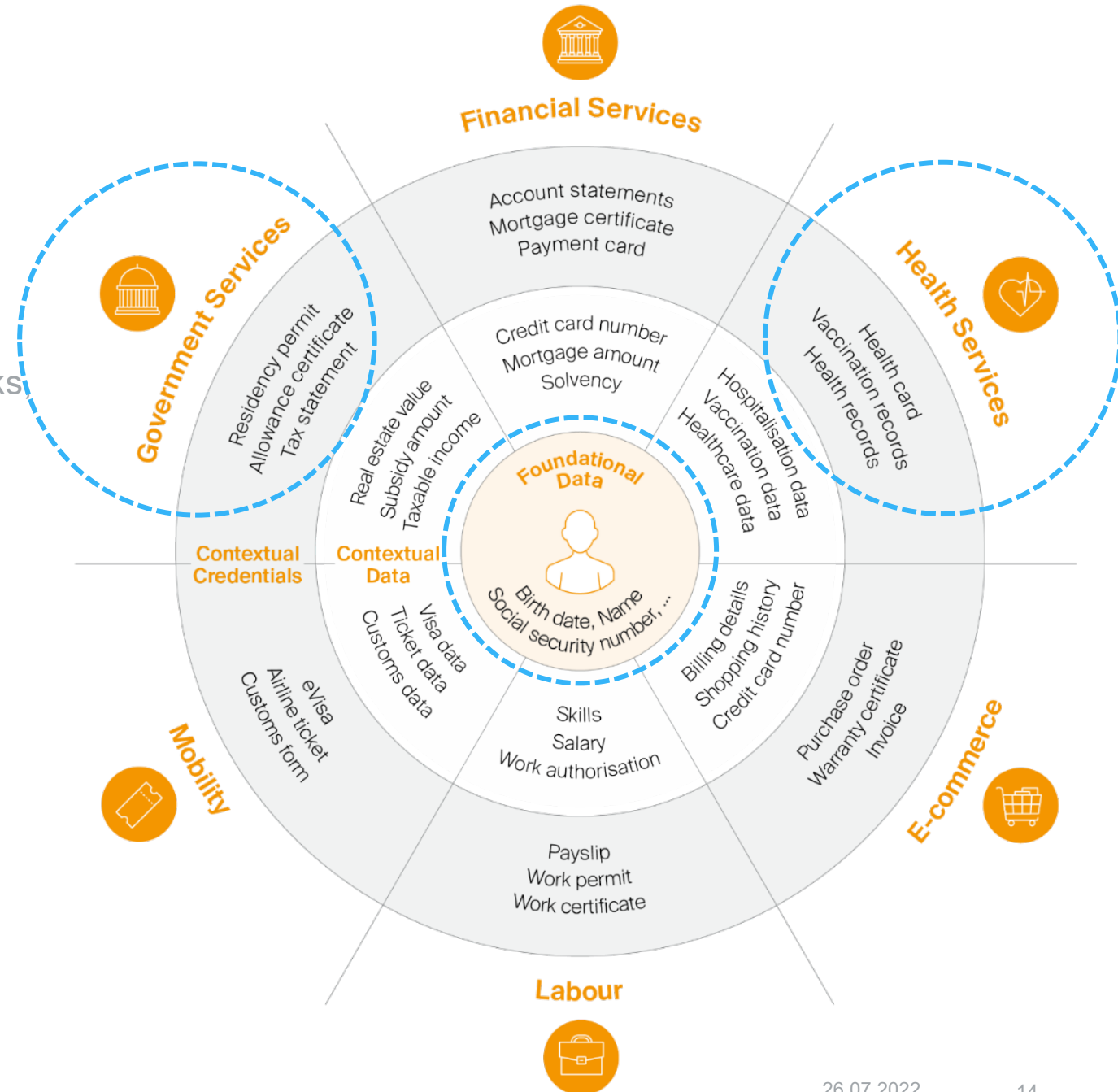
## As an Issuer of Foundational credentials

- National e-ID, Digital Travel Credentials
- Identity verification of individuals – in person checks, physical documents, etc

## As an Issuer of Contextual credentials

- Drivers' licenses
- Health Insurance cards
- Marriage certificate
- Family certificate
- Etc..

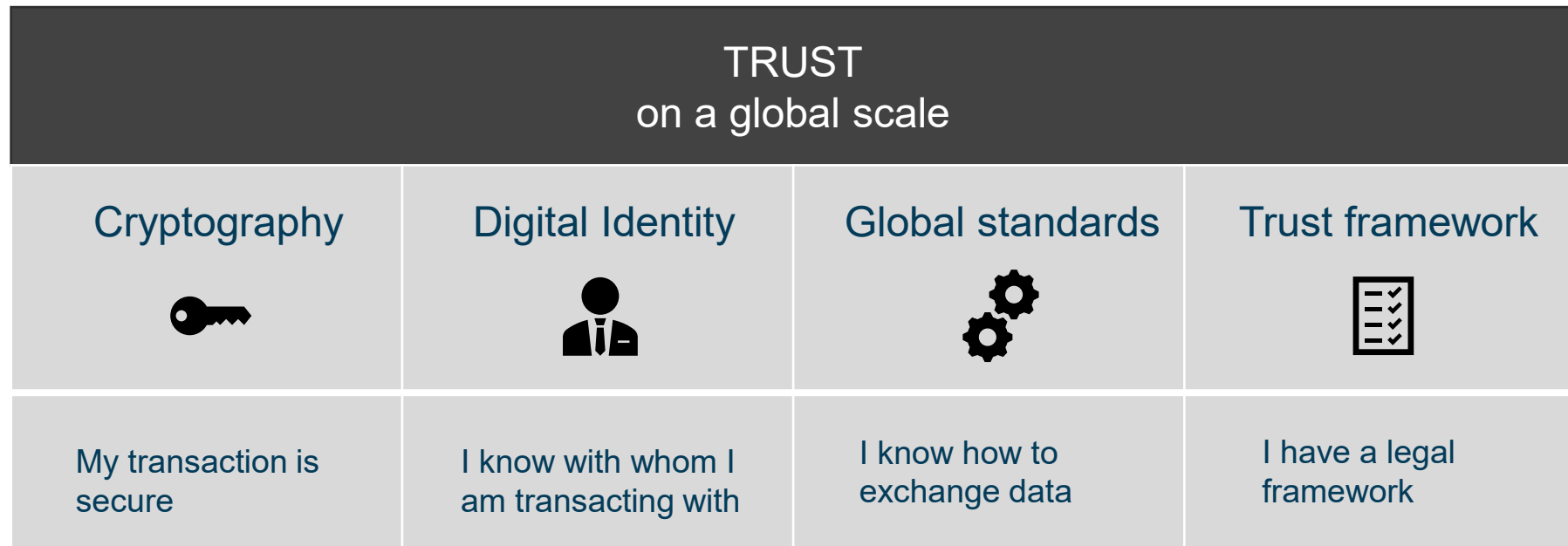
## As a Verifier of foundational identity data and/or other contextual data





# Self-Sovereign Identity towards a Web of Trust

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SSI

# SSI References

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# Government SSI Initiatives

## CANADA

- British Columbia Hyperledger Aries Cloud Agent Python protocols (2021)
- Association of Registrars of the Universities and Colleges of Canada (ARUCC) - MyCreds™ (2020)
- British Columbia Personal Health Wallet (2020)
- British Columbia OrgBook BC (2019)
- Treasury Board Secretariat of Canada - User-Centric Verifiable Digital Credentials (2019)
- Alberta's Credentials Ecosystem (2019)
- Ontario's Verifiable Businesses (2019)

## UNITED STATES

- DHS SVIP Green Card (2019-2021)
- State of New York - NY Excelsior Pass (2021)
- U.S. Department of Education - Lifelong Learner (2020)
- State of North Dakota (2020)
- State of Texas (Austin) - MyPass (2020)
- State of Illinois - Birth Registration (2017)

## BRAZIL

- Brazil's Ministry of Planning (2017)

## ARGENTINA

- DIDI (Digital Identity for Inclusion (2019) - NGO & Interamerican Development Bank (IBD)

## UNITED KINGDOM

- Self-Sovereign Identity Consultation (2021)
- NHS Digital Staff Passports (2021)
- UK Dept. of business (2020)
- UK Financial Conduct Authority's (FCA) (2020)
- Digital Identity Scotland (DIS) (2019)

## FINLAND

- TrustNet's Findy (2017)

## IRELAND

- Emerald Project (2020)

## INTERNATIONAL ORG.

- ITU: Building Blocks (GovStack Initiative) (2022)
- UNICC: Blockchain-based SSI (2021)

## MALTA

- Consultation (2019)

## MAURITANIA

- Digital Identity (2022)

## SIERRA LEONE

- National Digital Identity Platform (NDIP) (2019)

## SOUTH AFRICA

- Yoma (2020)
- ABSA (2018)
- South Africa Financial Blockchain Consortium (2018)

## AUSTRIA, BELGIUM, GERMANY, LUXEMBOURG, NETHERLANDS, SWITZERLAND

- Austria: EBSI4Austria (2020), myIDsafe (MeineSichereID) (2019), E-gov innovation center (EGIZ) (2018)
- Belgium: "Blockchain on the Move" - The City of Antwerp, the Flemish Government and V-ICT-OR (2018)
- EUROPEAN UNION: European Digital Identity Wallet (2022)
- Germany: IDUnion (2020), LISSI (2019)
- Luxembourg: TrustMyData - Luxembourg residence certificate (2021)
- Netherlands: Trustchain SSI (2018), Known Traveller Digital Identity (2018)
- Spain: VCs for Social Benefits EBSI (2021)
- Switzerland: Canton of Aargau (2021), Canton of Zug (2017), Canton of Schaffhausen (2018)

## TURKEY

- Turkish Ministry of Foreign Affairs (2021)
- Refugees project (2021)

## JORDAN

- Refugees project (2016)

## SOUTH KOREA

- Driver's license (2022)
- Disability card (2021)
- City of Busan identity verification for citizens B Pass (2020)
- Busan, State of Gyeongnam - Digital Public Service Platform (2020)
- Seoul Metropolitan Government - Blockchain Administration Service (2020)
- Government employee (2020)

## JAPAN

- COVID-19 vaccination certificate (2021)

## MARSHALL ISLANDS

- National digital currency & SSI (2020)

## BANGLADESH, INDIA, MYANMAR, THAILAND, SINGAPORE

- Bangladesh: Digital Health ID (2021)
- Myanmar: ZADA Covid Pass (2021)
- India: Blue Number (2020)
- Singapore: SingPass / sg-ID (2020)
- Thailand: National Digital Identity (NDID) (2020)

## KENYA

- Birth registration (2021)
- Cash Transfer program (2021)
- Ministry of Information, Communications and Technology (2019)

## HONG KONG SAR, CHINA

- Digital Identity Digital ID Working Group HKMA & ASTRI (2016)

## AUSTRALIA

- New South Wales Digital ID & Verifiable Credentials (2021)
- Digital Identity (2019)

## NEW ZEALAND

- Digital Identity New Zealand (2020)

## REGIONAL INITIATIVES



## INT. ORG. INITIATIVES



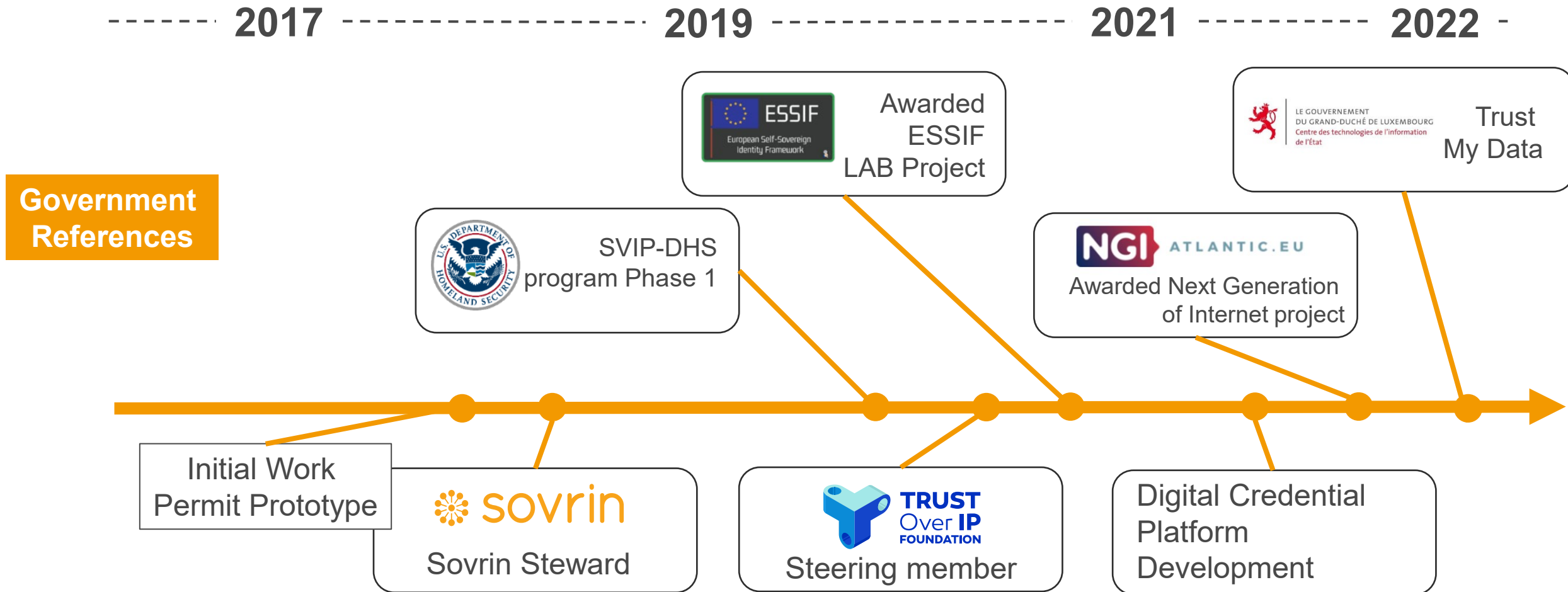
## CONSORTIUMS



\*A non-exhaustive list



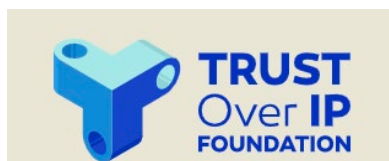
# SICPA SSI References



# Our Identity Connections

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SICPA



LE GOUVERNEMENT  
DU GRAND-DUCHÉ DE LUXEMBOURG  
Centre des technologies de l'information  
de l'État



SICPA

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# SICPA at a glance

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Innovation  
at core



Founded in  
**1927**



Technology  
& Services



**Swiss**  
company



# Business activity missions

## Currency Services & Solutions

Protecting sovereign monetary systems



## Marking & Traceability Solutions

Protecting products through unique item-level, secure codes



## Fuel Marking Solutions

Protecting provenance and quality of fuel



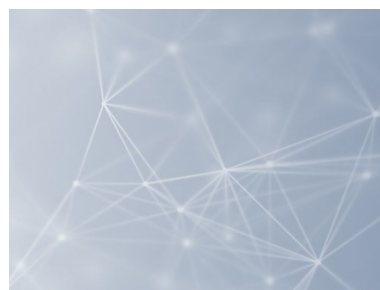
## Identity Security Solutions

Protecting identities of people for lifetime authentication



## Integrity Solutions

Protecting integrity of goods, documents, transactions and processes



## Health Security Solutions

Advancing governments' sovereignty in their response to health emergencies, and enabling trust in critical supply chains



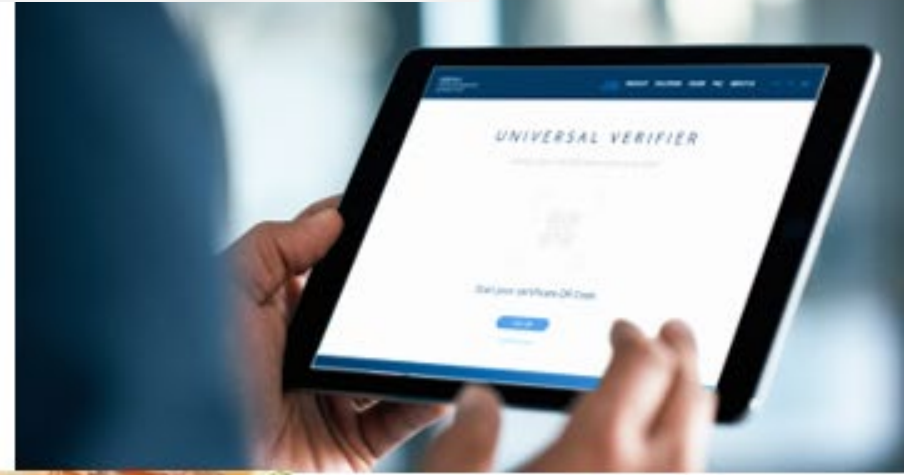


We protect and trace  
valuable goods,  
identities and data

**140 Billion  
Banknotes**  
secured annually in  
over **160  
countries.**



Leading provider of  
**Proofs of Provenance,  
Integrity,  
Authentication and  
Presence**



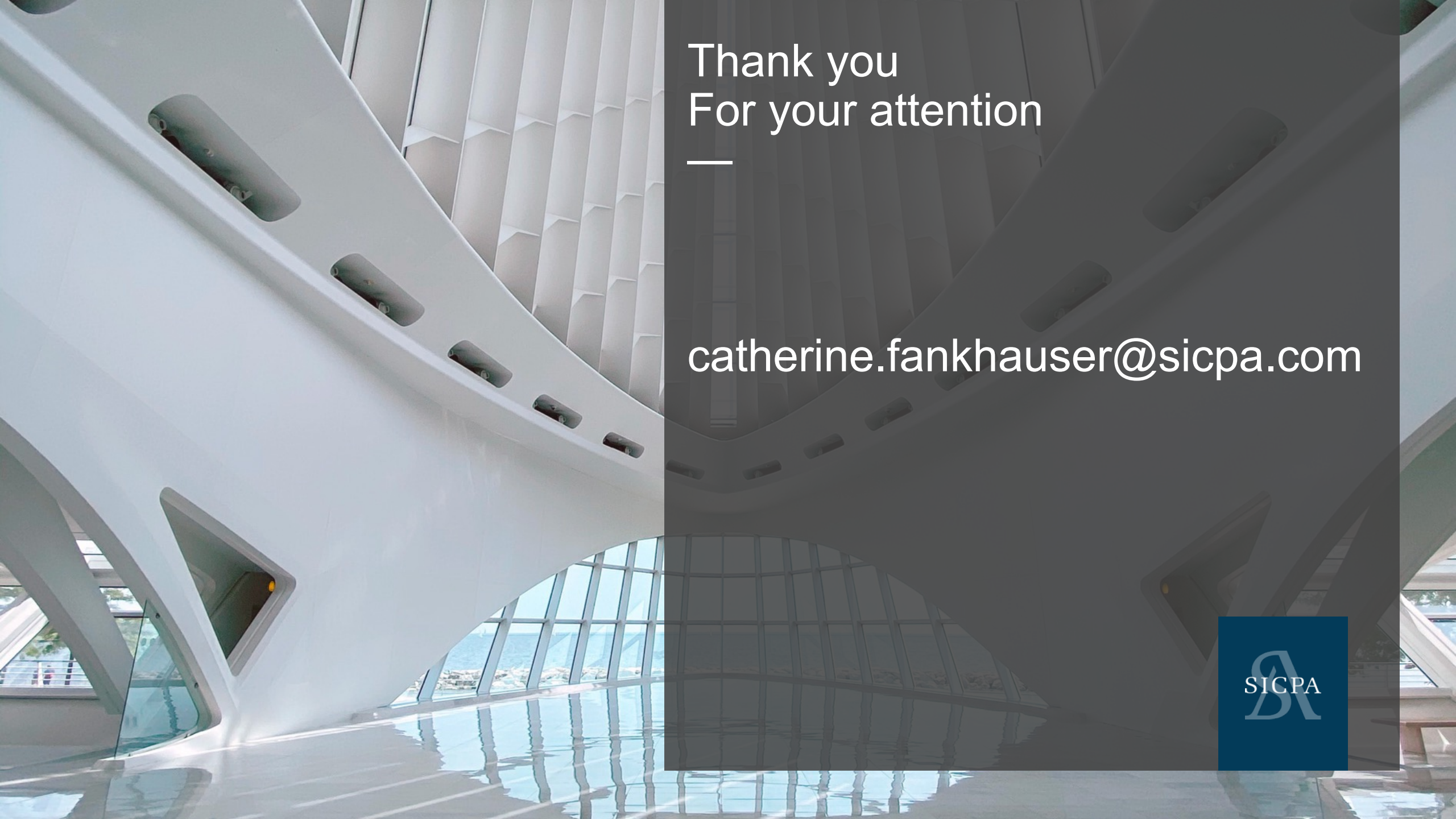
**80+  
Billion**  
Products marked  
and traced  
annually



**A long-trusted  
advisor**  
to governments, central  
banks, high security  
printers and industry







Thank you  
For your attention  
—

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