

ITU DLT Meetup #9, June 2nd, 13:00

**PROPOSALS FOR THE “TECHNICAL FRAMEWORK FOR
DLT REGULATION” (Q 22/16) IN THE LIGHT OF THE
DIFFERENT DLT-NETWORK AND LAW APPROACHES**

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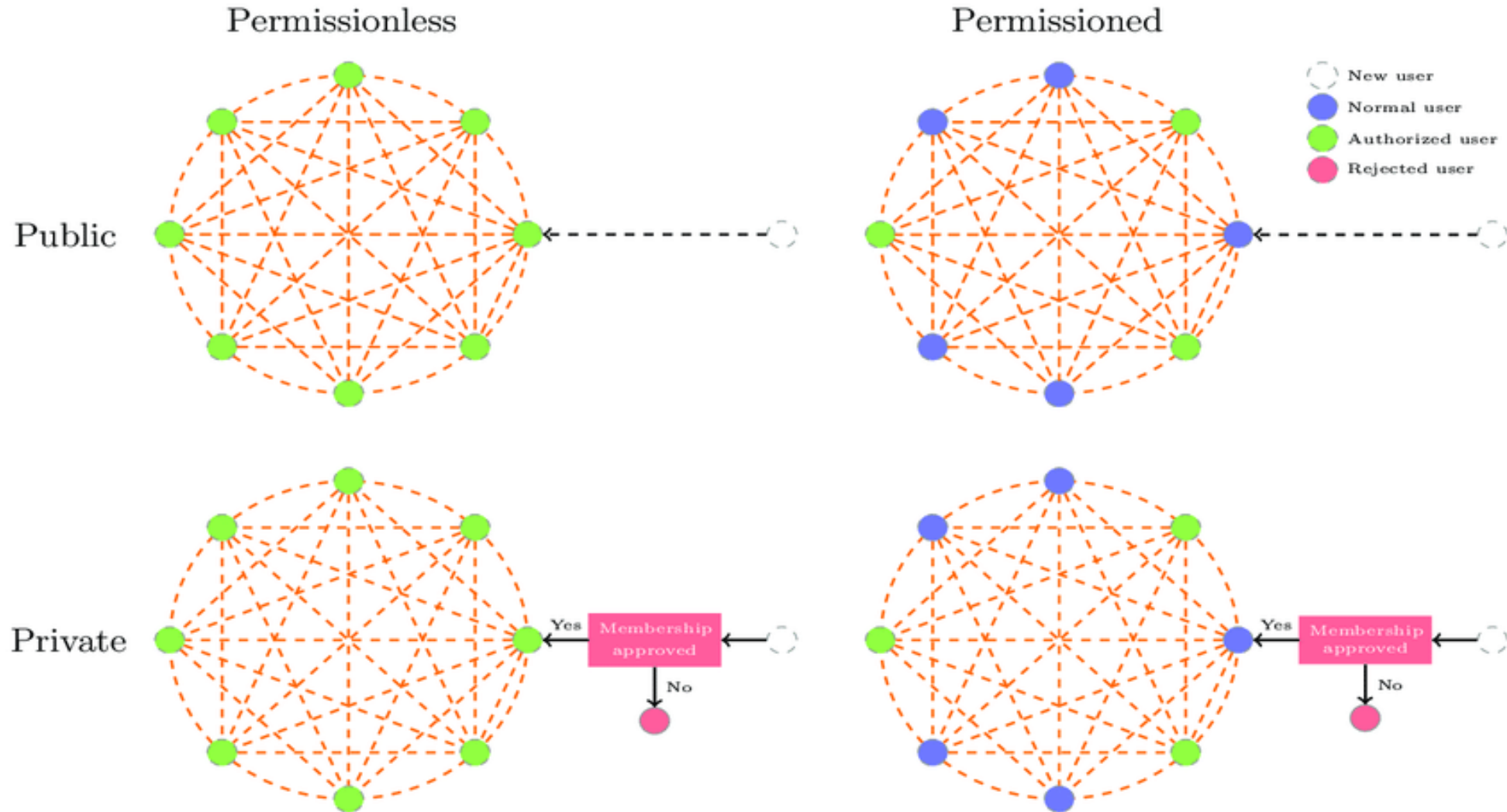
Summary

0. DLT / PDL (ETSI) context

1. Privacy challenges

2. Financial services

DLT / PDL (ETSI) context



1. Privacy challenges

- a) Distributed (DLT) authentication by TTPs in Self-Sovereign Identity (SSI) decentralized systems
- b) Distributed high-level assurance of Digital Identities (eIDAS 2 Regulation)
- c) DLT as an automated trust distributor with respect to
 - Verifiable Credentials
 - SSI itself
- d) DLT as a mechanism to attribute civil liability (top down approach) to
 - Network governors and managers
 - Nodes
 - Involved parties (slide 10)

2. Financial services

The regulatory global potential of the 2020 Digital Finance Strategy for Europe (COM/2020/591 final) / 2018 FinTech action plan (COM/2018/0109 final)

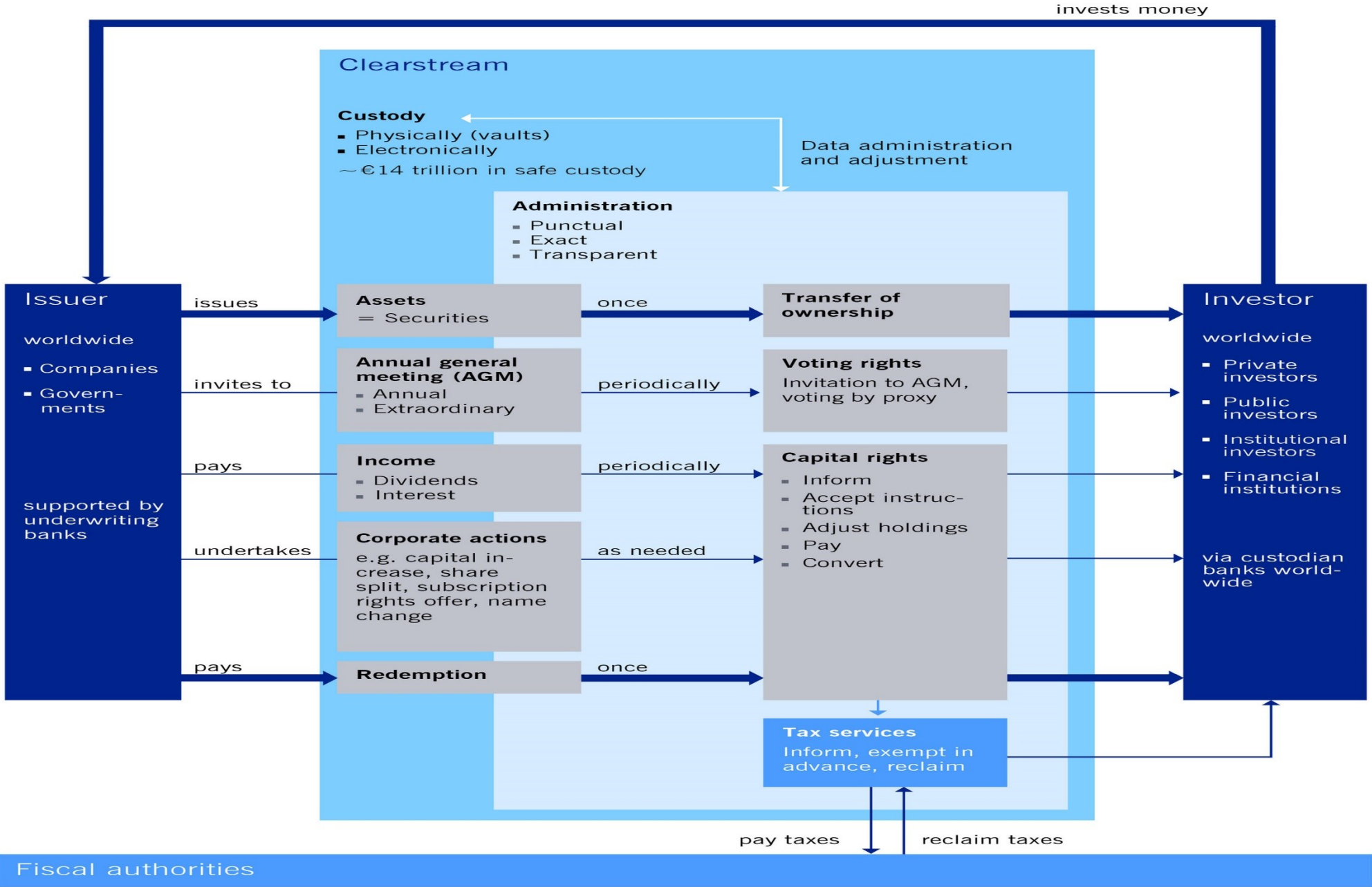
- A) Crypto-asset (token) markets and DLT infrastructures (MTFs and platforms)
- B) Crypto- (virtual-)asset service providers (CASP / VASP) regulation and new enhanced supervision; ISP equivalence and market abuse issues
- C) Token reconceptualization and taxonomies (securities, EMTs, ARTs, UTs, NFTs)
- D) DLT platform and investment contract services: MiFID/MIFIR equivalence
- E) Other DeFi package related issues (DORA, DSP2, AML, KYC)

Central registration vs Decentralized token registration

Trading, clearing and custody



Clearstream: functions of a central securities depository



DLT Counterparties vs Central Counterparty

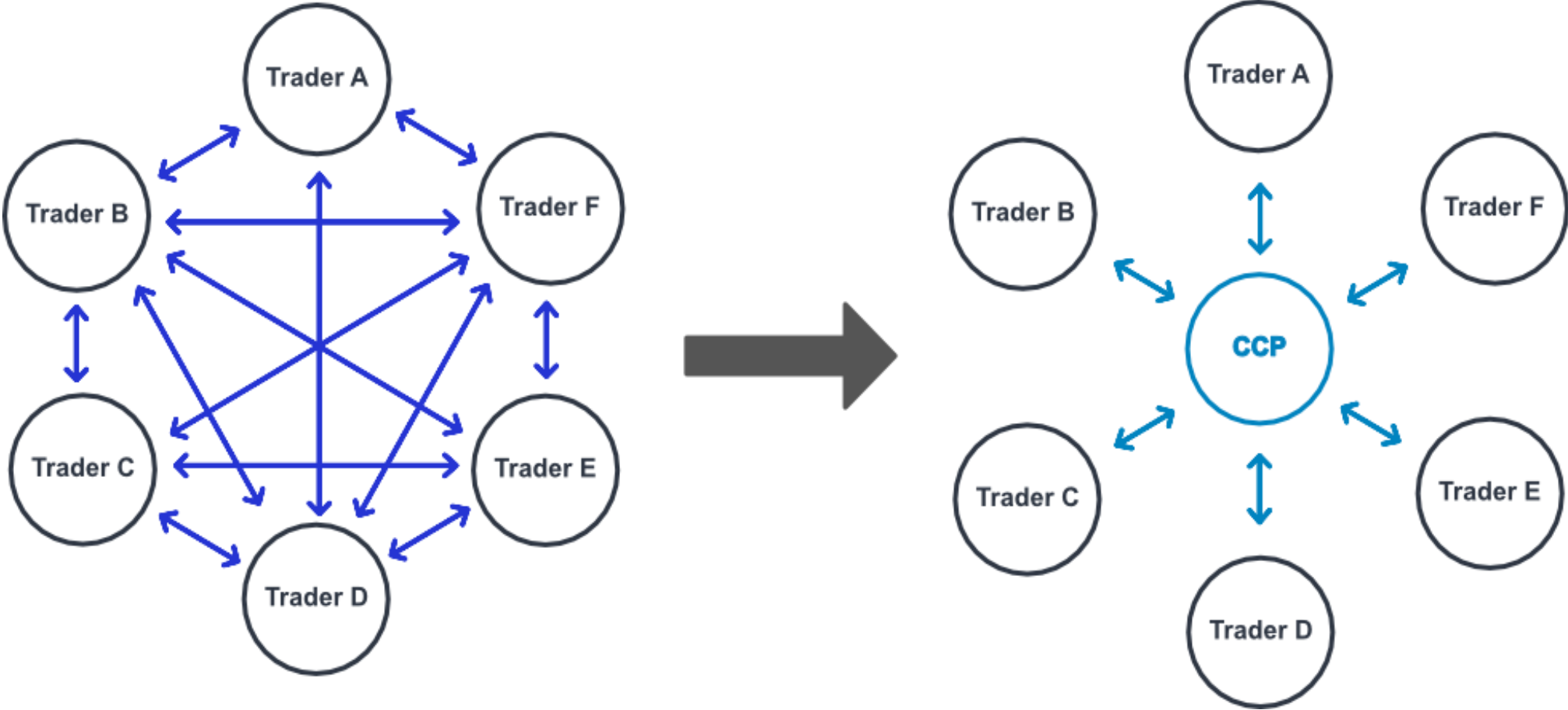
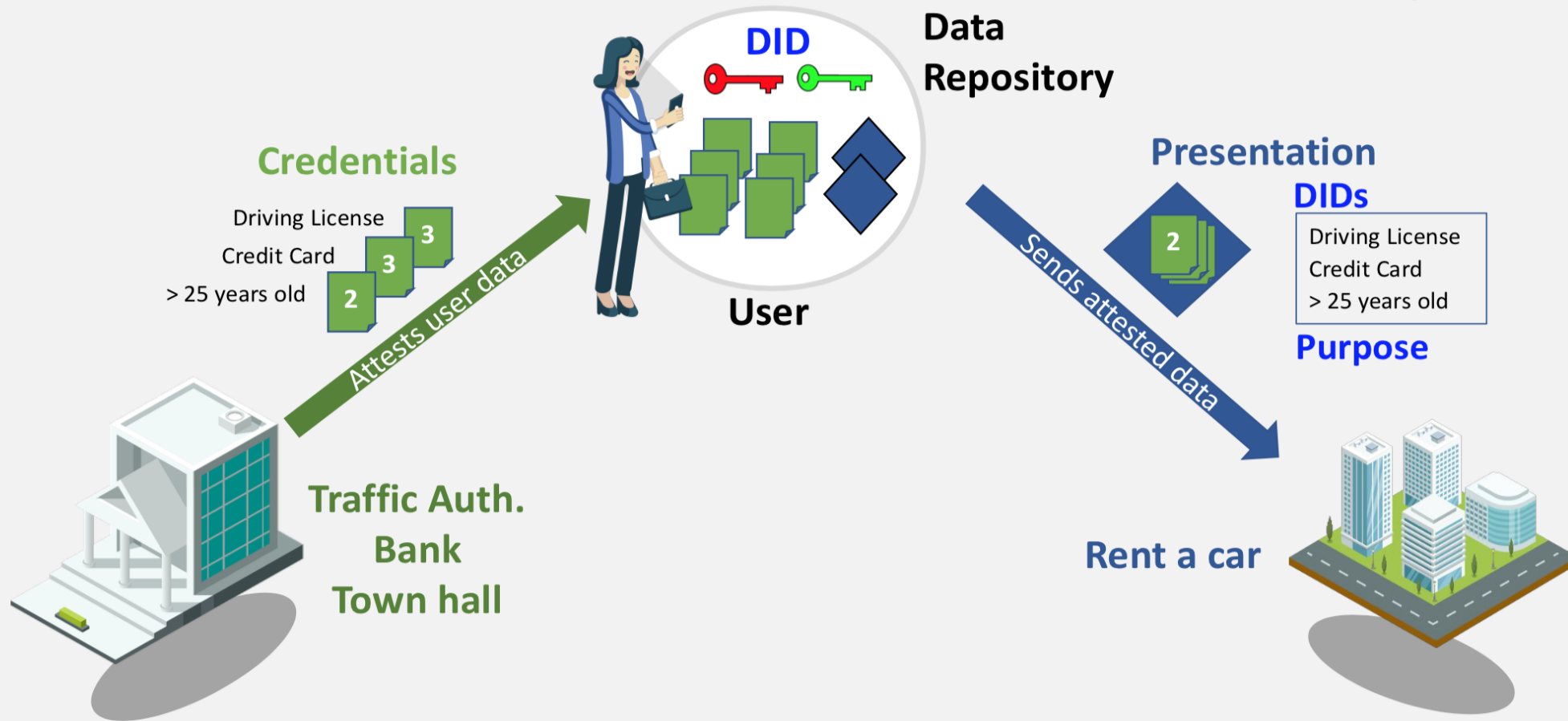


Figure sources

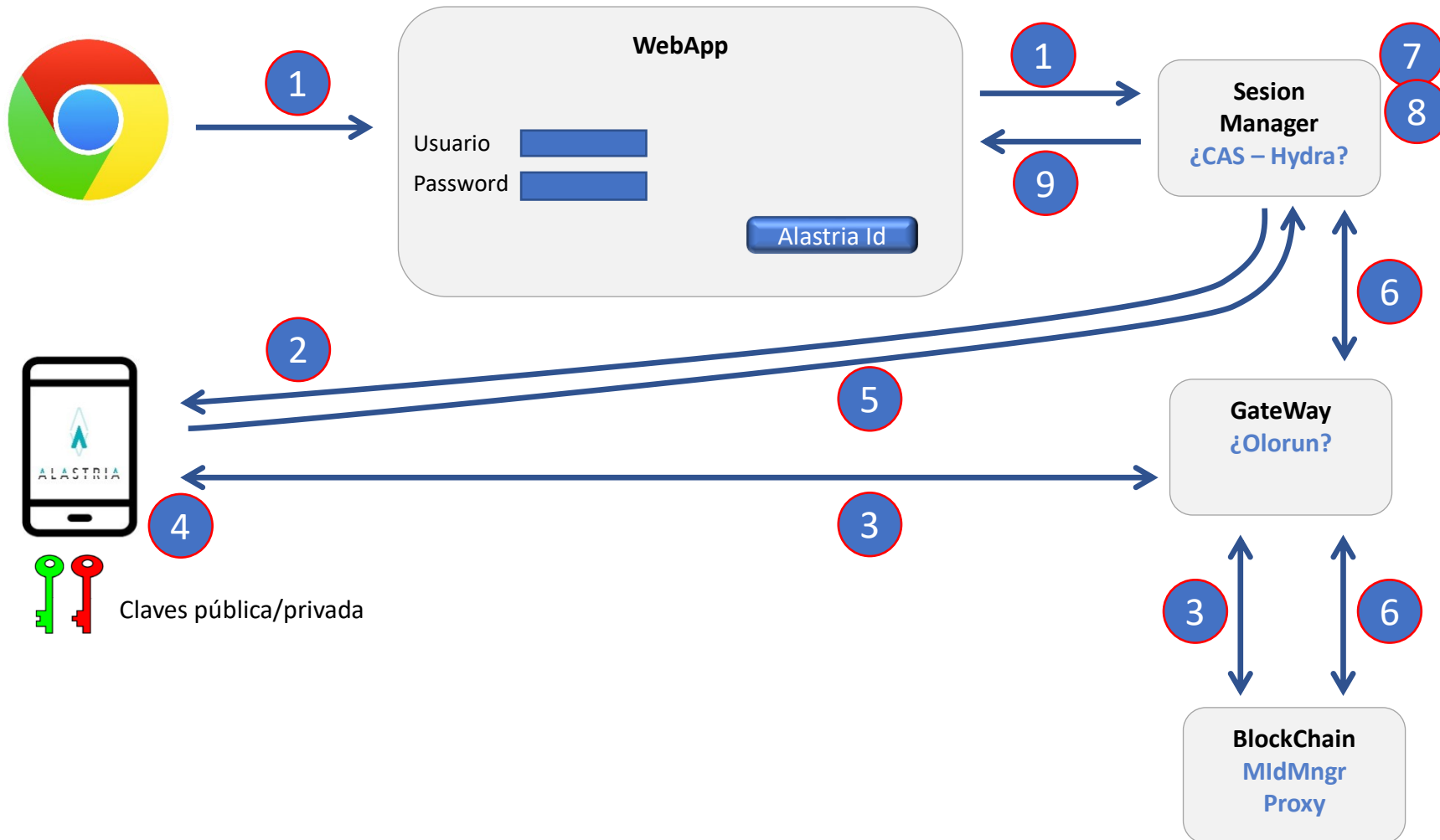
- Slide 3 <https://www.researchgate.net/figure/Classification-of-DLT-architectures-based-on-network-access-and-authorization-fig3-338623380>
- Slides 6 -7 <https://www.deutsche-boerse.com/dbg-en/our-company/know-how/deutsche-boerse-up-to-date/central-securities-depositories-clearstream>
- Slide 8 <http://www.iotafinance.com/en/Financial-Definition-central-counterparty-ccp.html>
- Slides 10-11: Alastria (2020), <https://alastria-es.medium.com/la-identidad-digital-de-alastria-presenta-su-primer-mvp-696750d687ac>

Alastria Digital Identity (distributed DLT SSI sample)

Example: renting a car



Authentication with Alastria Digital Identity



PROCESS

1. Acceso a WebApp y selección de AlastriaId como identificación, iniciando la creación de la sesión.
2. Push de requerimiento de Identificación seguido de:
 - + JWT firmado (K App) con:
 - Session Key
 - Alastria Id de la aplicación
 - Dirección callback del GW
3. Solicitud de la clave publica de la aplicación
4. Comprobación de la identidad de la aplicación.
5. Aceptación de la sesión ¿firmada por KPersonal?
 - Sesión Key
6. Solicitud de la KPub del usuario
7. Comprobación de la identidad del usuario.
8. La primera vez, se liga Alastria ID con el identificador interno corporativo.
9. Envío del token de sesión JWT