



European Digital Identity

*"eIB EU PROJECT - eIDAS ENABLED i-BANKING",
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Political Context
















*“Every time an App or website asks us to create a new digital identity or to easily log on via a big platform, we have no idea what happens to our data in reality. **That is why the Commission will soon propose a secure European e-identity.** One that we trust and that any citizen can use anywhere in Europe to do anything from paying your taxes to renting a bicycle. **A technology where we can control ourselves what data and how data is used.***

([SOTEU - President Ursula von der Leyen, 16 September 2020](#))

*«The European Council **calls for the development of an EU-wide framework for secure public electronic identification (e-ID)**, including interoperable digital signatures, to provide people with control over their online identity and data as well as to enable access to public, private and cross-border digital services. It invites the Commission to come forward with a proposal for a **‘European Digital Identification’ initiative by mid-2021.** »*

([EC Conclusions, 1-2 October 2020](#))

Overview of notified eID schemes under eIDAS

Country	eID scheme	Publication in OJ	Country	eID scheme	Publication in OJ
 Germany	National ID card	26.9.2017	 UK	GOV.UK Verify	2.5.2019
 Italy	SPID	10.9.2018	 Czech Republic	National eID card	13.9.2019
	National eID card	13.9.2019			
 Spain	National ID card	7.11.2018	 Netherlands	eHerkenning	13.9.2019
				DigiD	21.08.2020
 Luxembourg	Luxembourg eID card	7.11.2018	 Slovakia	National eID card	18.12.2019
 Estonia	ID card, Mobiil-ID, e-Residency	7.11.2018	 Latvia	eID karte, eParaksts	18.12.2019
 Croatia	Personal ID card (eOI)	7.11.2018	 Denmark	NemID	8.04.2020
 Belgium	Citizen eCard	27.12.2018	 Lithuania	National eID card	21.08.2020
	FAS/itsme	18.12.2019			
 Portugal	National ID card	28.2.2019	~60% of the EU population covered by notified eID schemes		
	CMD - mobile	8.04.2020			

eIDAS in action

AMLD5 – Directive (EU) 2018/843

Published on OJEU on 19/06/2018

Payment Service Directive 2 – Directive (EU) 2015/2366

Commission Delegated Regulation (EU) 2018/389 – Regulatory Technical Standards for Strong Customer Authentication

Single Digital Gateway - Once-Only Principle cross-border Regulation (EU) 2018/1724 on Single Digital Gateway

Digital on-boarding and portability of KYC

EC Expert Group on eID and remote KYC jointly managed by CNECT, JUST and FISMA ([final reports](#))

Company law

[DIRECTIVE \(EU\) 2019/1151](#) amending Directive (EU) 2017/1132 as regards the use of digital tools and processes in company law – [consolidated text](#)

Tackling online disinformation / Fighting fake news

COM(2018) 236 final adopted on 26/04/2018

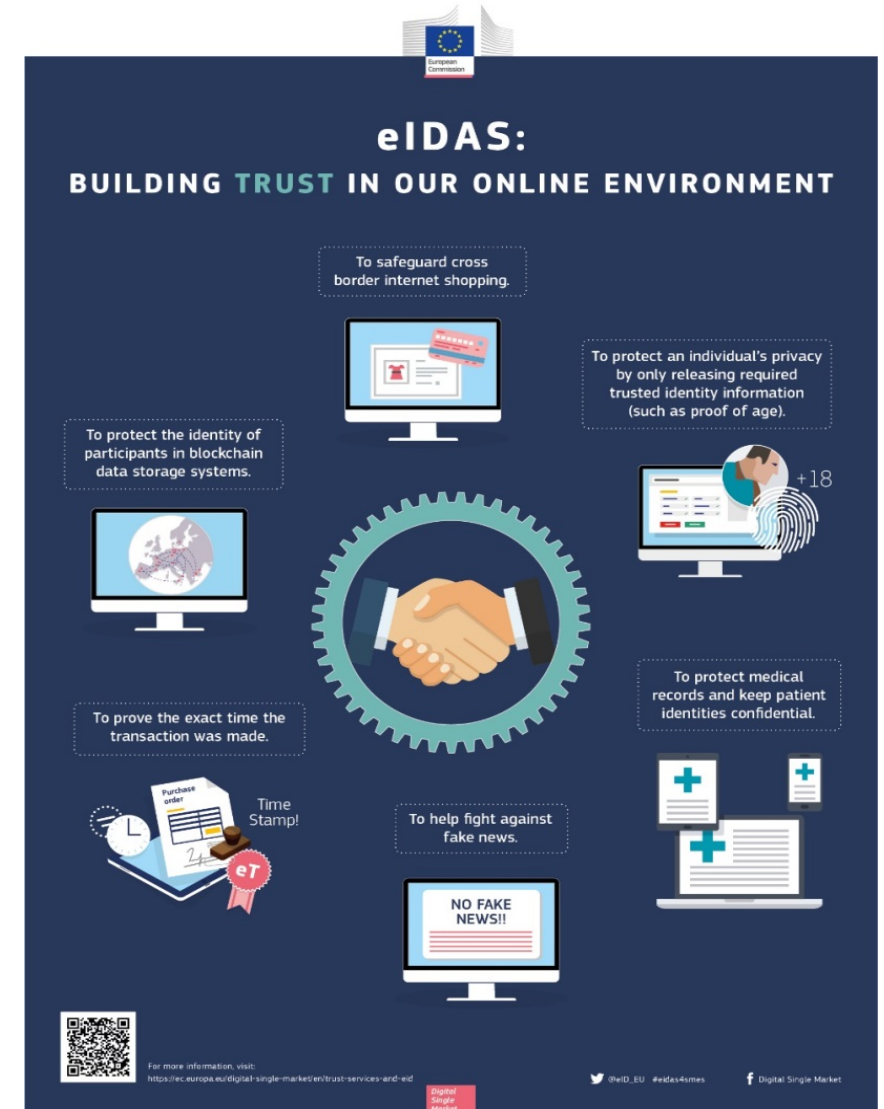
GDPR compliance

Data minimisation; use of trusted attributes, credentials and entitlements (such as age verification, proof of residence, etc.)

Audiovisual Media Service Directive

Protection of minors / Age verification and parental consent

...



eIDAS: an eID that “speaks for us and not about us”

Give the opportunity to citizens to:

- **control and selectively disclose identity data** when accessing online services cross border
- **limit the collection of their identity data** to those strictly needed for a transaction while ensuring always full accountability.

Reinforce:

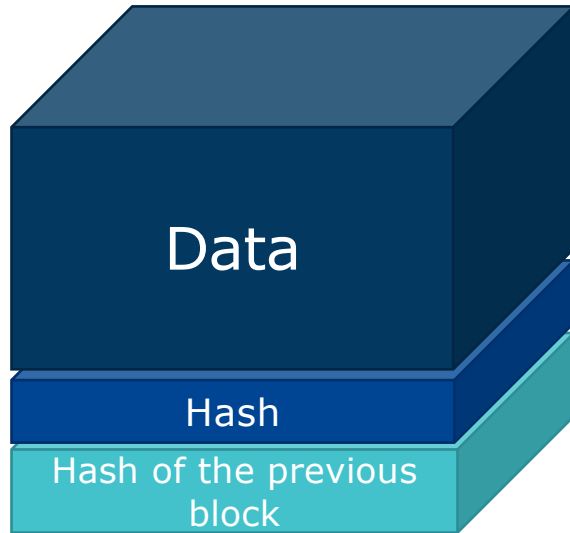
GDPR compliance : *Data minimisation; use of trusted attributes, credentials and entitlements (eg proof of residence, etc.), requirements regarding parental consent for the processing of personal data of children below a certain age ...*

Audiovisual Media Service Directive: Protection of minors / Age verification and parental consent / Extension to video-sharing platforms / Emphasis on co-regulatory and self-regulatory instruments ...

Once Only Principle: *Access to data based on “digital authentication” roaming / Consent / Proof of origin & integrity / ...*

Cybersecurity: *eID&TS are preventative security measures (e.g. access to platforms) / going beyond encryption (eg QWCAS) / support “need2know” (eg KYC) / promote risk management culture (e.g. audit, certification, SBN, etc.) / bring greater transparency and accountability online (fight disinformation) ...*

How eIDAS Regulation is relevant to blockchain: Content of the blockchain as an electronic document



Article 3

Definitions

For the purposes of this Regulation, the following definitions apply:

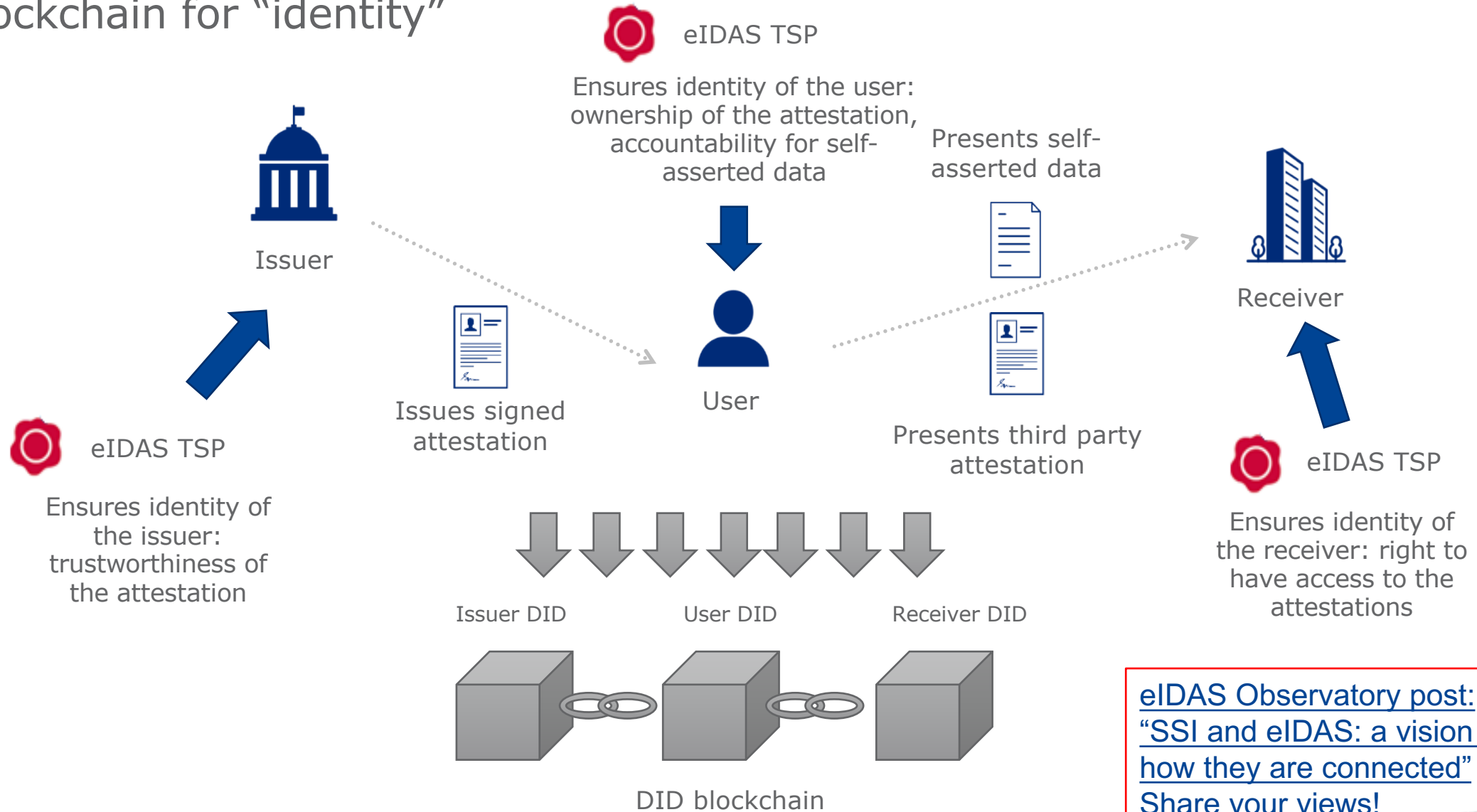
(35) '**electronic document**' means **any content stored in electronic form**, in particular text or sound, visual or audiovisual recording;

Article 46

Legal effects of electronic documents

An electronic document shall not be denied legal effect and admissibility as evidence in legal proceedings solely on the grounds that it is in electronic form.

How eIDAS Regulation is relevant to blockchain: Blockchain for “identity”



The SSI eIDAS bridge

The European Commission developed the SSI eIDAS bridge, an ISA² funded initiative, to promote eIDAS as a trust framework for the SSI ecosystem. It assists a VC issuer in the signing process, and helps the verifier to automate the identification of the organization behind the issuer's DID. Simply by "crossing" the eIDAS Bridge, a Verifiable Credential can be proven trustworthy in the EU.



[Watch the video on SSI eIDAS Bridge!](#)

Is all this enough? No, it isn't. Why?

- **User Expectations** - speed, security, protection of personal data
 - 63% want a **secure single digital ID** for all online services that gives them control over the use of their data
 - 72% want to know **how their data are used** when they use social media accounts
- **Market demands** - versatile, secure and trustworthy identification
 - Online services, telecom, finance, transport, etc.
- **Platforms** – Risk of further market dominance, user lock-in, loss of control over data
- **Current (public) eID system not fit for purpose**
 - low uptake (~50% of EU population), only used in public sector, complex / fragmented
- **Technological Change** - mobile identification, distributed ID systems,

Vision for a European Digital Identity

- **Universally Available** – all EU citizens and businesses may use it on a voluntary basis
- **Universally Useable** – legal obligation to recognise by private and public service providers for all transactions that require authentication (« EU single-sign-on »)
- **Protecting Personal Data** – users must be able to take control of their identity and control the disclosure of personal data/attributes

Basic Features

- **Mobile Application** – *universally available, user-friendly, user-controlled (app-based)*
- **Common Standards** – *universally useable and recognised, personal data protection*
- **Exchange of Credentials (« proofs ») linked to Trusted Sources** – *user-controlled, universally useable, personal data protection*

EUeID – Ecosystem

Trusted sources



Tax Register



Member State /
National Register



Professional
Roll

**Issuance /
Access**

Identity / Credential
Provider A



Identity / Credential
Provider B



Identity / Credential
Provider C



Provision

Credentials

**Control /
Release**

age, gender, owner of a driving
or fishing licence, engineer,
notary, doctor, architect,
student, teacher, auditor,
accountant, journalist, tax
residency...

Use Cases

Access to eGov /
eHealth Application

Prove Professional /
Academic Qualification

Access to Platforms

Demonstrate Business
Role / Interests

Access to Financial
Services

[...]

Roles

- **Member State** – provides authentic data to issue identity credential, supervises identity provider (ex-ante autorisation with conformity assessment)
- **Identity / Credentials Provider** – provides credentials to users, must have lawful access to authentic data
- **User** – controls the storage, transfer and release of credentials via a SmartApp (authentication e.g. PIN, biometric ..)
- **Service Provider** – consumes and verifies credentials, does not communicate with identity provider, GDPR principles apply (e.g. data minimisation)

Benefits – Users

- **Key to the Digital Universe** – « Single Sign On », no need to remember passwords, access to the broadest range of public and private services online
- **Simplicity** – all on one device
- **Control of identity data** – privacy and protection of personal data, discretionary disclosure (provide only the required information)

Benefits – Service Providers

- **Creates a level playing field** - reducing the gateway function of platforms
- **Unlocks business opportunities** – supports the creation of new online services relying on identity verification
- **Reduces costs and liability risks** – no need to develop self standing authentication, manage costs and liabilities, improved efficiency and reduced risk of fraud in the Financial sector (Know Your Customer)
- **Facilitates GDPR Compliance** – no unnecessary data handling
- **Improves security and trust of digital identities** - Common EU high level security standards

Digital identity in digital finance and retail payments

Digital Finance Strategy for the EU - COM(2020) 591 final

- “Enabling EU-wide interoperable use of digital identities”
 - “By 2024, the EU should implement a **sound legal framework enabling the use of interoperable digital identity solutions which will enable new customers to access financial services quickly and easily (“on boarding”)**. This framework should be based on more harmonised anti-money laundering (AML) and counter-terrorism financing (CTF) rules and a revised framework for electronic identification and trust services for electronic transactions (e-IDAS Regulation). It should **enable customer data to be reused subject to informed customer consent**, which is based on full transparency about the consequences and implications of such reuse.

Retail Payments Strategy for the EU - COM(2020) 592 final

- “Exploiting the potential of electronic identity (eID) for customer authentication”
 - With a view to facilitating **cross-border and domestic interoperability**, the **Commission will explore, in close cooperation with the EBA, ways to promote the use of electronic identity (eID) and solutions based on trust services, building on the further enhancement of eIDAS, to support the fulfilment of Strong Customer Authentication requirements under PSD2 for account login and initiation of payment transactions.**

Global standard-setter

At multilateral level

- UNCITRAL Working Group IV on eCommerce
- WTO negotiations on eCommerce: Chapter on eIDs and trust services
– Ambitious EU approach
- Financial Action Task Force (FATF) “Guidance on Digital Identity”
- Interoperability through standards: ETSI study on PKI-based trust services around the world
- ...

For further information and feedback

Web page on eIDAS

<http://ec.europa.eu/digital-agenda/en/trust-services-and-eid>

eIDAS Observatory

<https://ec.europa.eu/futurium/en/eidas-observatory>

Text of eIDAS Regulation in all languages

<http://europa.eu/!ux73KG>

Connecting Europe Facility – Catalogue of Building Blocks

<https://ec.europa.eu/cefdigital>



eIDAS: [@eID_EU](#)
[@eGov_EU](#)