



**Network of trust for education AKA  
Cross-border Blockchain for Diploma Data in the EU**

## Contexto

- El objetivo del Proyecto es facilitar la movilidad de los estudiantes, automatizando la verificación de los diplomas, facilitando así la movilidad de los ciudadanos entre fronteras
- Ciudadano, empleador, empleado, situaciones de especial atención (refugiados)

# En este contexto, una credencial firmada digitalmente debería reconocer los logros de aprendizaje adquiridos en formación acreditada, no acreditada y formación no formal



## Accredited Qualifications

Qualifications **mapped to a NQF/EQF** and awarded at the end of a **formal learning experience**

(e.g. Degrees, school leaving certificates)



## Non-Accredited Qualifications

Credentials **not mapped to a NQF/EQF** and awarded at the end of a **formal learning experience**

(e.g. Language-proficiency exams, IT certifications)



## Records of Experience

Credentials recognising the completion of **non-formal and informal learning experiences**

(e.g. VNIL Certificates, Employer recommendations)



### Content of the credential



Identity of the user and awarding body



Skills (or LOs) certified



Course/programme attended



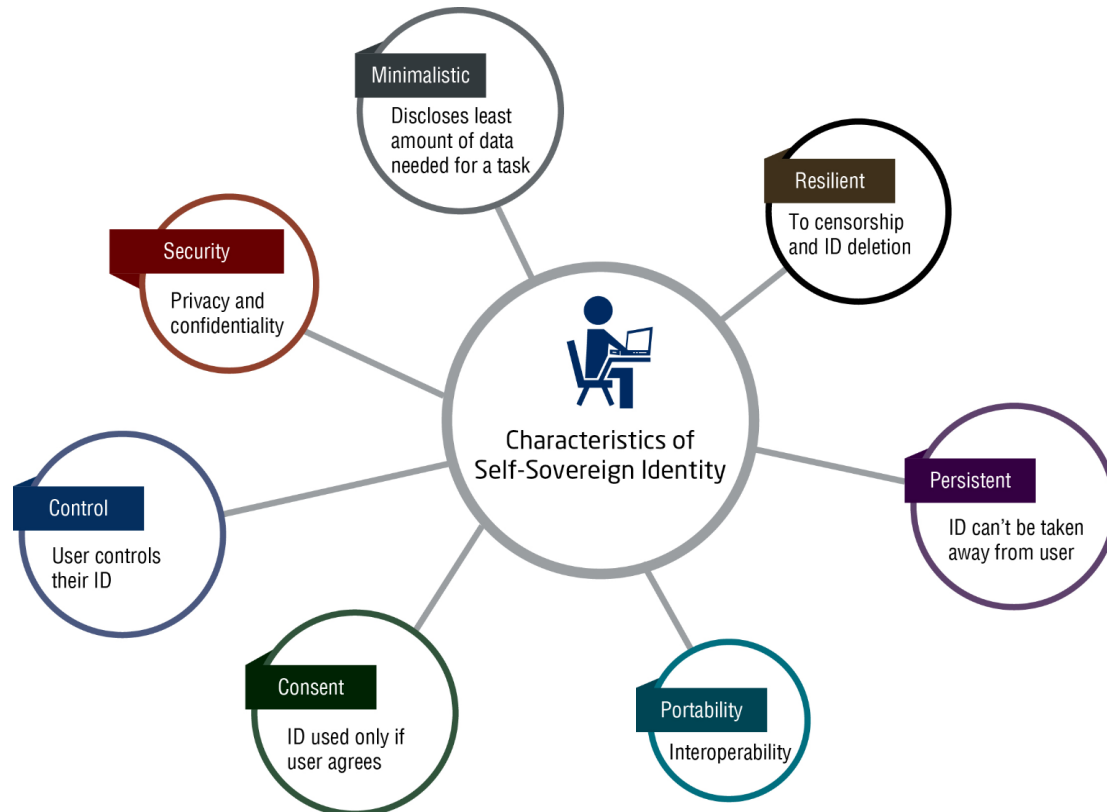
Programme accreditation

## 2 “principios” transversales

No data on-chain



## Self Sovereign Identity SSID



# EUROPEAN BLOCKCHAIN PARTNERSHIP 2019-2020

## MARCO ORGANIZACIONAL

### EBP POLICY GROUP

### EBSI TECHNICAL GROUP

#### EBSI FOCUS



**SUPPORT EBSI DEVELOPMENT**  
IDENTIFICATION AND SELECTION OF NEW USE CASES  
ALIGNMENT OF EBSI PRIORITIES WITH POLICY PRIORITIES

#### POLICY FOCUS



**DEFINE POLICY AGENDA ON DLT**  
IDENTIFY POLICY AND REGULATORY AREAS THAT ARE CRITICAL FOR BLOCKCHAIN TECHNOLOGY DEPLOYMENT. E.G. SMART CONTRACTS

AGREE ON REPRESENTATION AND PARTICIPATION AT THE INATBA GLOBAL REGULATORY DIALOGUES INITIATIVE



**CARRY-OUT A SURVEY ON BLOCKCHAIN AND FUTURE DIGITAL SERVICES OF PUBLIC INTEREST (FEED INTO DEP)**

CREATE AN OVERVIEW OF EU, NATIONAL AND GLOBAL DEVELOPMENTS RELATED TO –

1. BLOCKCHAIN AND HIGH PERFORMANCE COMPUTING
2. BLOCKCHAIN AND ARTIFICIAL INTELLIGENCE
3. BLOCKCHAIN AND SKILLS GAPS FOR SERVICES OF PUBLIC INTEREST
4. OTHERS



**INPUT INTO GLOBAL REGULATORY DIALOGUES (WITH INABTA)**

TO BE LAUNCHED BY OCCASION OF THE WORLD BLOCKCHAIN CONGRESS (FALL 2019)

OTHERS...

#### EBSI USER GROUPS

NOTARISATION U-G

DIPLOMAS U-G

ESSIF U-G

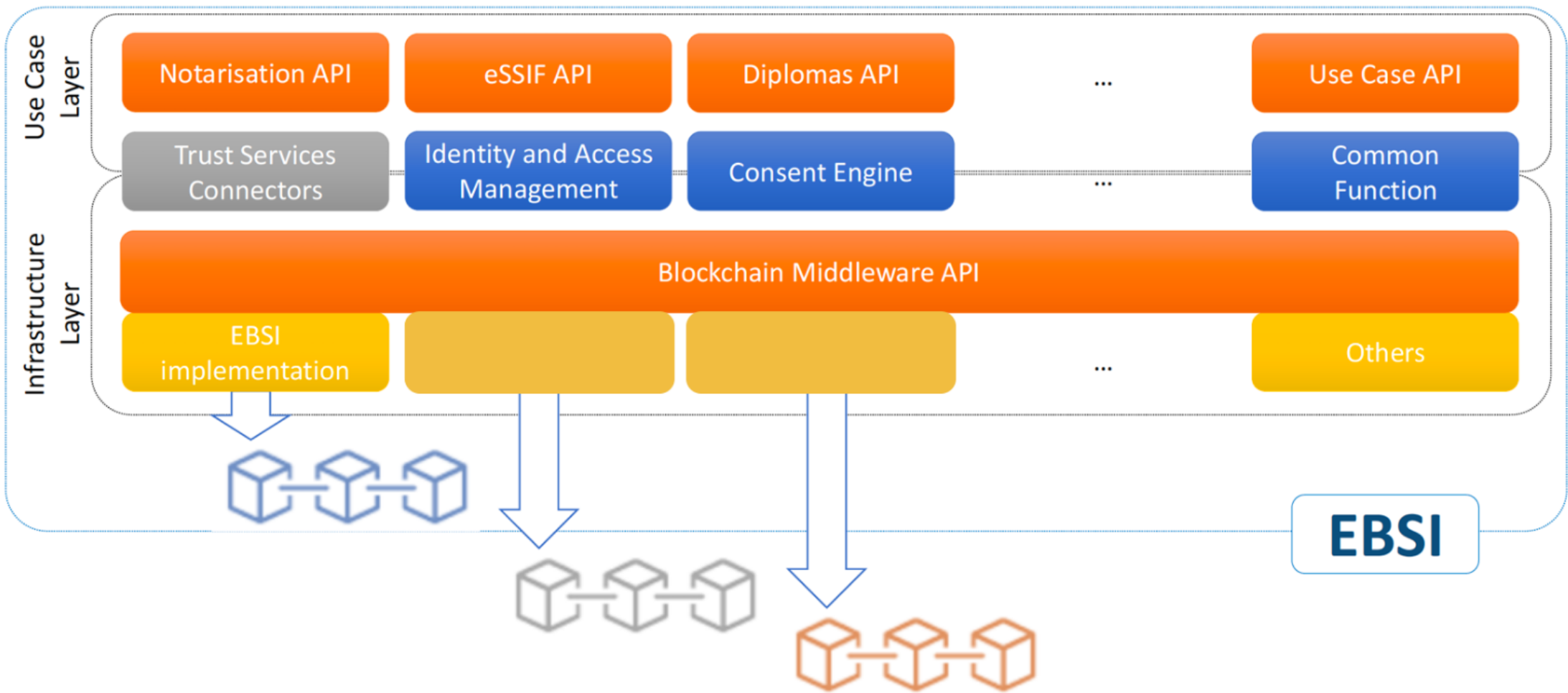
TAXATION – IOSS U-G\*

Los 4 casos de uso iniciales.  
CRUE participa en el caso de uso del título

# EI EBSI

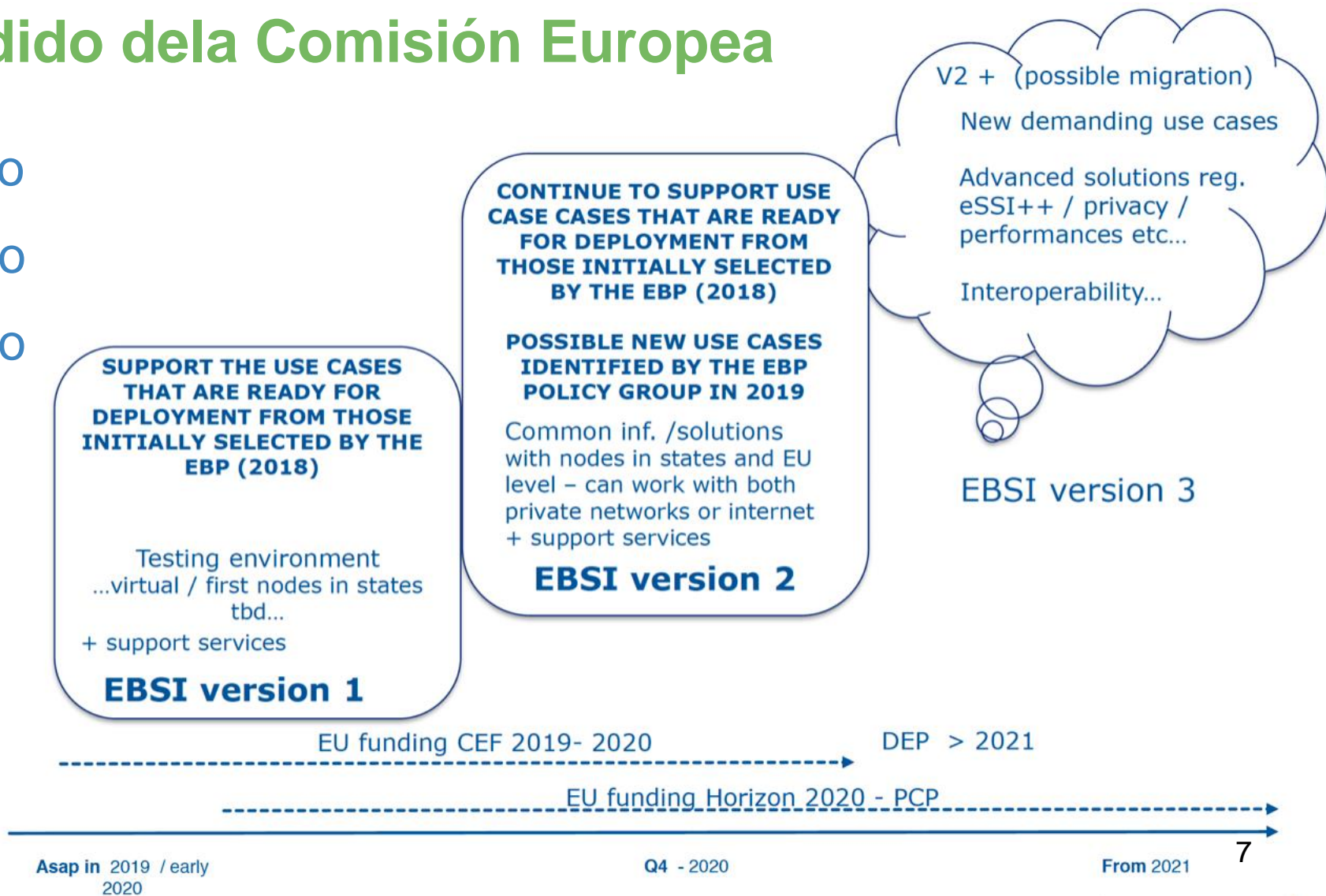


Business Application



## Impulso fuerte y decidido de la Comisión Europea

- 2018-19 4 casos de uso
- 2019-20 + casos de uso
- 2020-21 + casos de uso



## Caso de uso del Diploma

Is proposed to implement some kind of framework for digitally-signed credentials. In order to help operationalize the framework, four core building blocks, including eIDAS components, standards, software and services.



### Identificación

Estudiantes a los que se otorgará la credencial



### Emisión

De credenciales, y envío a los titulares



### Almacenamiento

Securización de credenciales en un wallet (online o offline)



### Verificación

Que la credencial sea auténtica, válida y emitida por una organización acreditada



### Compartición

La información acreditada con cualquier otra persona u organización con tan solo un click



## Normalización y estandarización: la base de la interoperabilidad



### Data Standards

- RDF
- JSON-LD
- Schema.org
- Solid
- ELMO
- HR Open Standards
- Linked Data Platform



### Educational Standards

- Open Badges
- ISCED
- EQF
- [EU tools]
- Diploma supplement



### Skill Standards

- ESCO
- SFIA
- ECTS
- DC VETS



### Web Standards

- Verifiable Claims
- EIDS



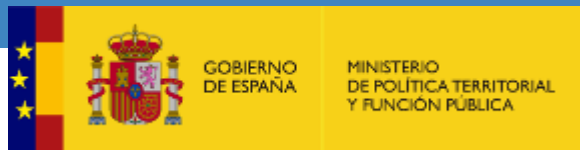
### Accessibility Standards

- W3C
- IMS



### Blockchain Standards

- ERC-721
- ISO working groups
- IEEE



**S.G. Administración Digital**



**European Blockchain Partnership**



**Caso de uso Títulos Universitarios**



**TIC** Comisión Sectorial de las Tecnologías de la Información y las Comunicaciones



**S.G. Títulos**