

Going digital: eduID, lifelong learning identity, student administration...

[GEANT 8th TF-EDU virtual meeting](#)

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Agenda

- Mobility figures
- Education: a complex ecosystem
- New paradigms
- Interoperability dimensions
- Need to cooperate/colaborate (for the public good!)
- Can GEANT and NRENs help?

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Potential opportunities on cross-border mobility



17 million
students (Bachelor, Master and PhD).



2,465
higher education institutions



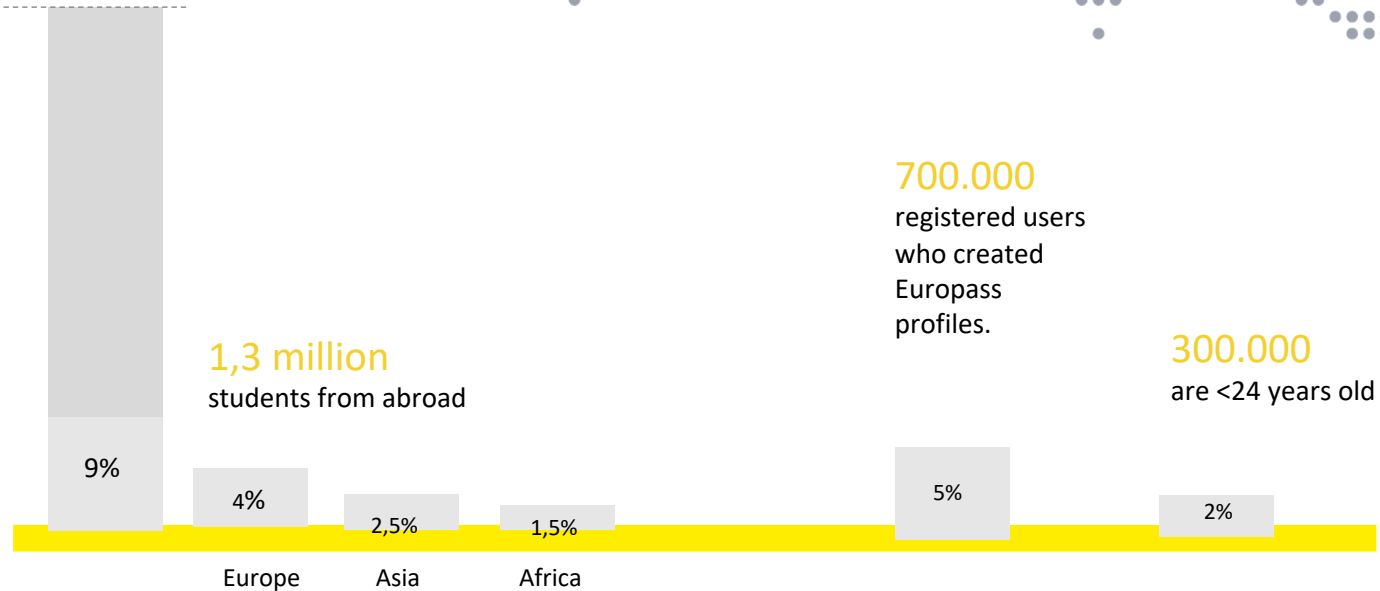
27
European countries



1.35 million
teachers



4.0 million
students graduated (diplomas)



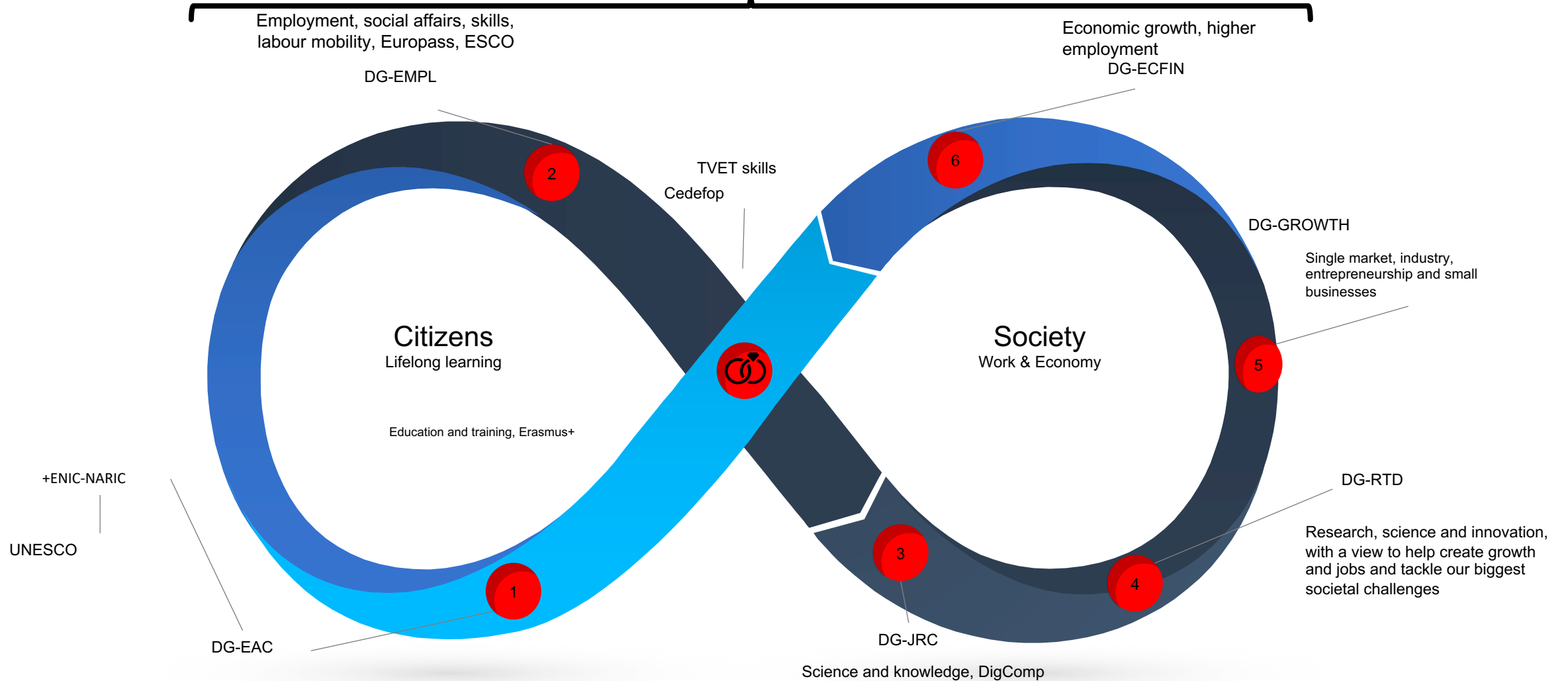
Sources
https://ec.europa.eu/education/european-tertiary-education-register_en
https://ec.europa.eu/eurostat/statistics-explained/index.php/Learning_mobility_statistics
https://ec.europa.eu/eurostat/statistics-explained/index.php/Tertiary_education_statistics#Graduates
<https://europa.eu/europass/en/statistics>

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Education in EU: a complex ecosystem

Digital Economy



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A new era

- The educational landscape, especially that of international mobility, faces a new era.
- To the old challenge of cross-border identity, we must add the latest challenges (and opportunities) defined in European strategies, policies, action plans and initiatives, such as the European Education Area and the European Research Area announced in September 2020.
- Now both identity and data mobility matter. And in relation to the data we must differentiate and manage both the accreditation of the educational achievements achieved and the "living" records of the students in progress (academic record - transcript)

Relevant topics in the educational policy agenda that impact on us

- European education area
 - 41 European university alliances
 - Common requirements for student identity, student identifiers, and data mobility (will there be 41 different approaches?)
 - European research area
 - Not just students mobility, also researchers and staff mobility
- Data strategy, Digital Education Action Plan
 - Digital credentials (by 2022, Europass Digital Credentials Framework, Europass Learning Model)
 - European Data spaces (“Common Science, research and innovation”, “Common European skills”, “Common European data spaces for public administration”, +7 more)

Relevant topics not just in education



Ursula von der Leyen

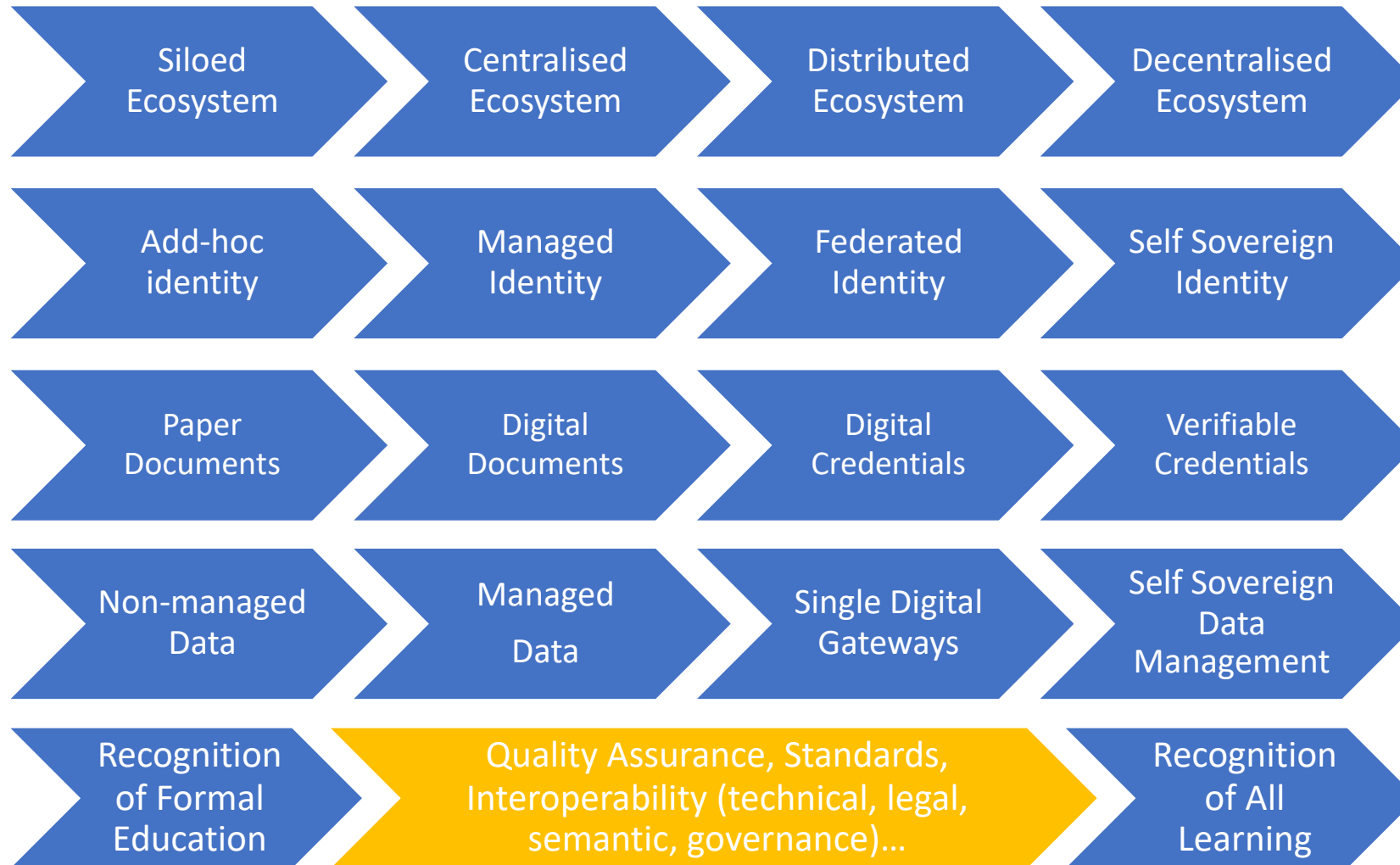
President of the European Commission

Every time a website asks us to create a digital identity or to log-in with a convenient tech platform single-sign-on service, **we actually have no clue what happens to our data and this has to stop.**

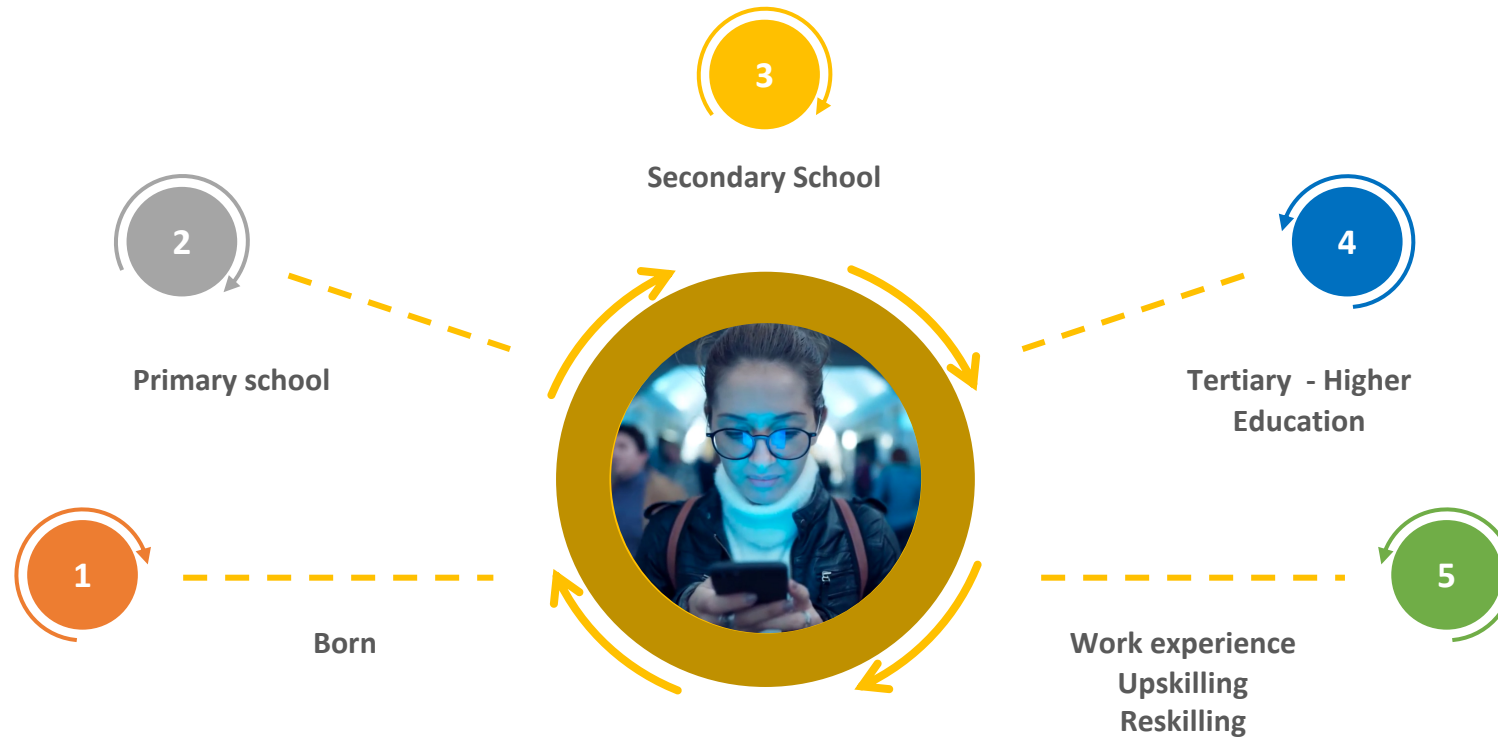
It is for this reason that the Commission will soon be proposing a **secure European digital identity**. We need to be able to trust it and citizens all over Europe need to be able to use it to do everything from paying their taxes to renting a bike.

A **technology where we can control ourselves which data is exchanged** and how it is used.

New paradigm: decentralisation



Self sovereignty in practice applied to education



- Student mobility for both, identity and records, will be a reality (through Student's Mobile wallet)
- Lifelong Learning will be a reality: credentials are owned, managed and controlled by the citizen
- The stacking credentials feature is natural solution for all lifelong learning credentials, including micro-credentials

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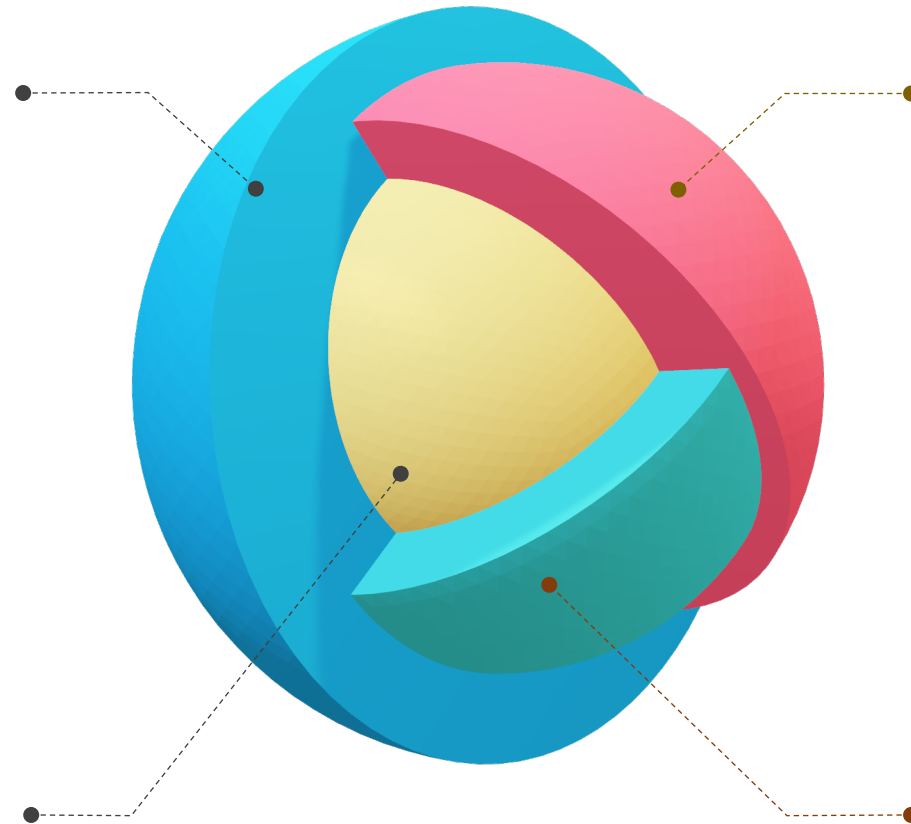
Interoperability (key) dimensions

Organizational

Legal

Semantics

Technical



Interoperability: legal dimension



Identity

The eIDAS trust framework: the common language for cross-border

Current eIDAS only defines “levels of assurance” for Verifiable IDs: Only IDs with substantial or high LoA must be accepted by Member States

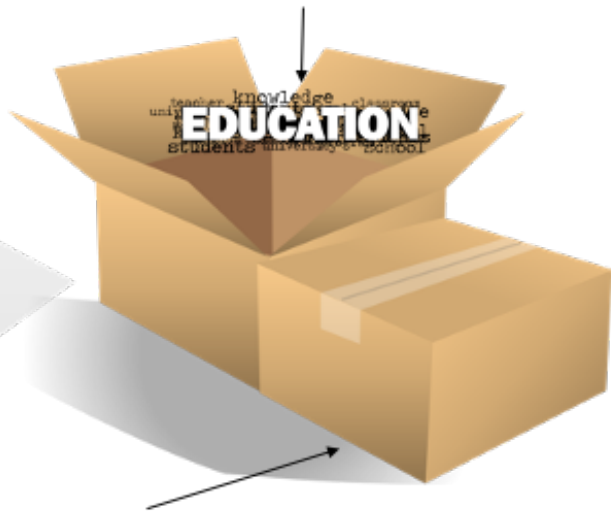
but ... IDs with low LoA may also be accepted on a voluntary basis, according to the corresponding national legislation applicable to e-Government processes

Data

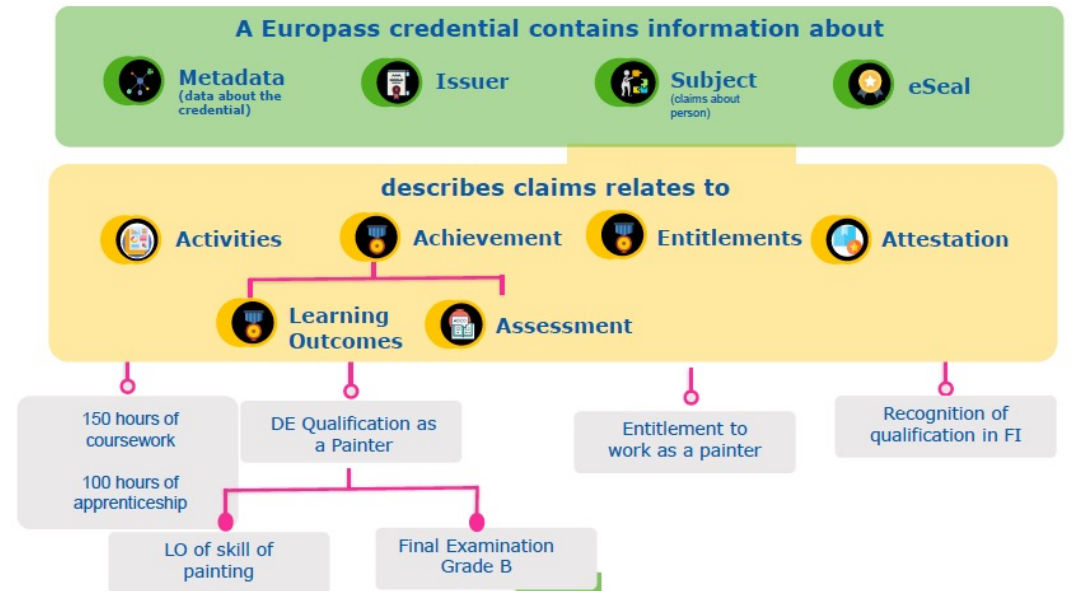
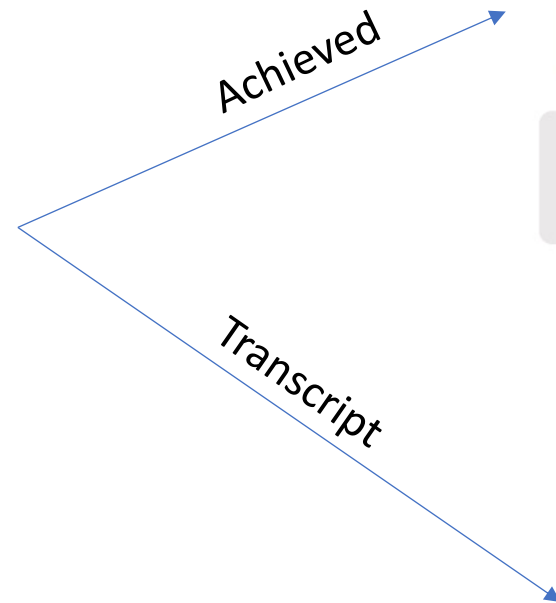
Data typically embody juridical acts, such as certifying acts by public authorities and other authoritative sources (including private sector bodies with respect to data they're authoritative for). Therefore, in the logic of eIDAS, they constitute **legally binding electronic documents, that should be authenticated according to the national legislation** (so national legislation/rules applies for cross-border mobility data)

Interoperability: technical and semantic dimensions

Common Data Model
The common way to describe educational credentials (contents)



The common way to package information (content)



emrex-eu/elmo-schemas



ELMO Schemas

3 Contributors 12 Issues 8 Stars 9 Forks



Interoperability: governance dimension



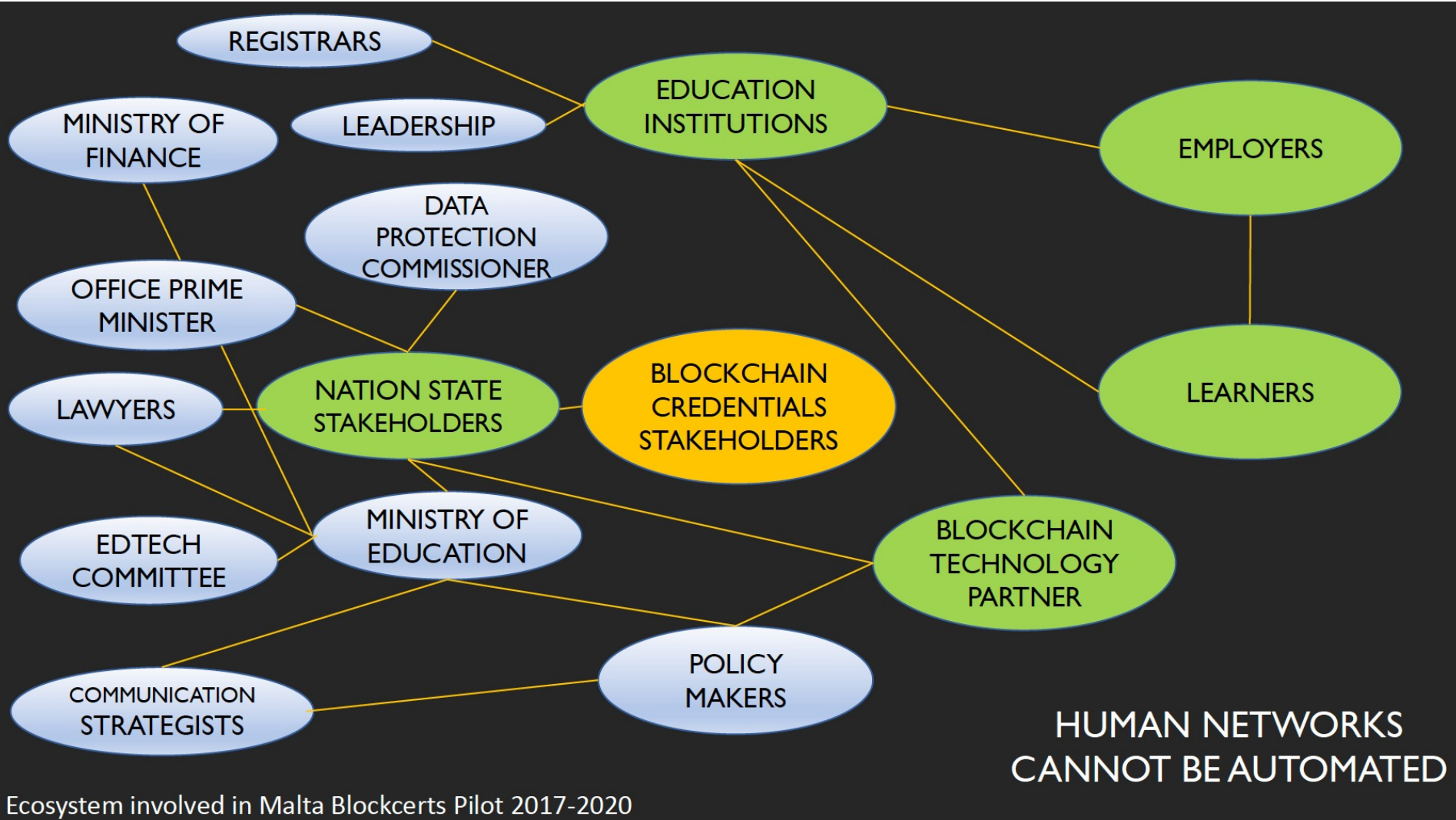
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The “old” project’s approach

- Different approaches for equivalent solutions
- There may be dependencies between projects, without a clear coordination / schedule of alignment between them
- Most projects are driven more from a technical rather than a business perspective.
- The business perspective is usually limited to that of the country itself (lack of cross-border vision of the EU)

Need to cooperate/collaborate



Ecosystem involved in Malta Blockcerts Pilot 2017-2020

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Y₄ E₁ S₁

W₄ E₁

C₃ A₁ N₁

GEANT & NRENs can help (some examples, let's discuss it together)

- Like today, promoting and providing a common neutral scenario in which we can share the current state and agree on how to move forward **together**
- Mapping of key projects and ongoing initiatives to plan their evolution or alignment due to new paradigms in education (e.g. Providing an educational sandbox and funding oriented projects)
- Communication/relation with key educational stakeholders
 - DG-EAC, DG-EMPL
 - DG-CNECT
 - DIGIT (re-use building blocks)
 - EUNIS
 - EUA
 - Educational working groups with representatives of all MS: EBSI, euID (eIDAs)
 - Participate in international WGs representing the EU vision/voice (W3C, W3C-VC, W3C-VC-EDU, ILR, IEEE, etc)
- Identify opportunities to:
 - Reuse EU standards
 - Provide and maintain reusable components
 - Provide services (not just project results) to ensure business continuity (and/or support NRENs to provide such services)

T H A N K



Y O U



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European Blockchain Partnership (EBP)
<https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/EBSI>

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