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NATIONAL EDUCATION PLATFORM

February 2022



AGENDA DRAFT

- 01** Background and Overview

- 02** Fields of Action

- 03** User Journey and Roles

- 04** Project Organization and Projects

- 05** Technical Implementation / Requirements



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01 BACKGROUND AND OVERVIEW



WHAT IS THE NATIONAL EDUCATION PLATFORM ABOUT?



A digital space for lifelong learning

The National Education Platform connects **educational offerings** and thus creates **access** to a **wider range of educational opportunities** for every citizen achieved by common standards, formats and interoperable structures

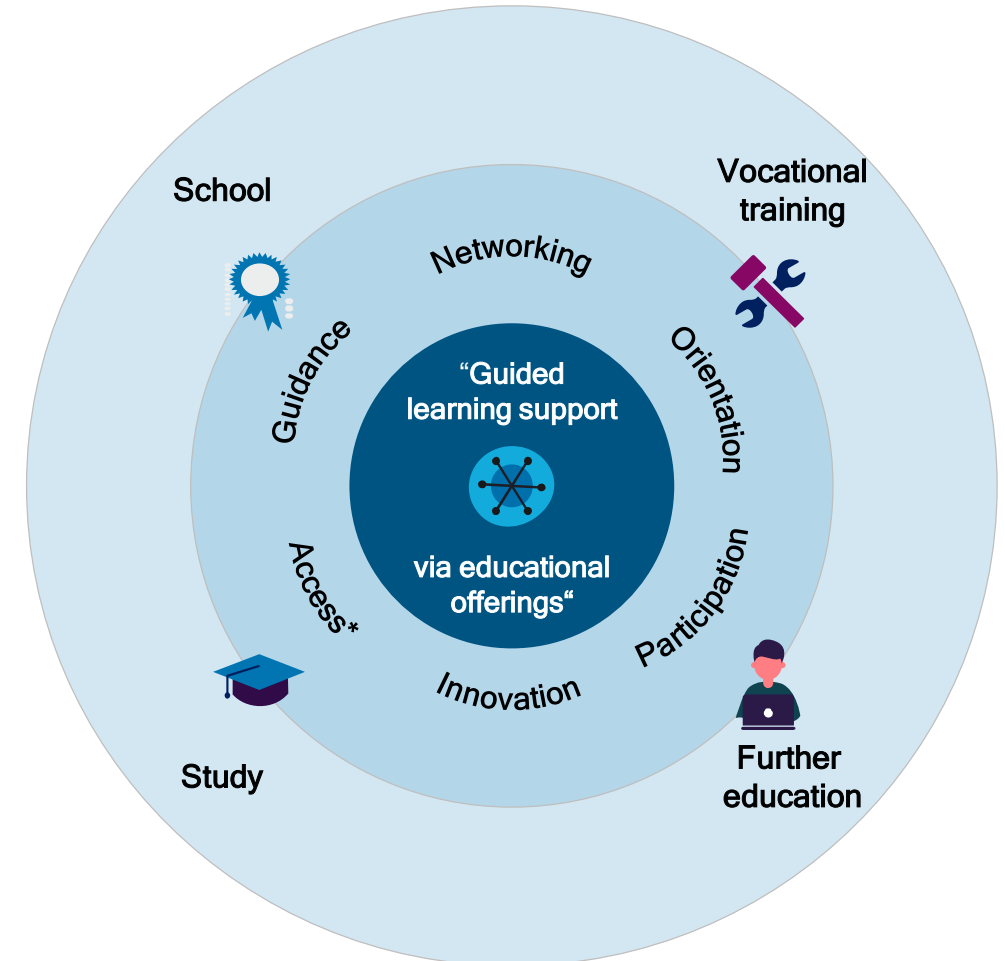
THE NATIONAL EDUCATION PLATFORM IS THE CORE ELEMENT OF A DIGITAL ECOSYSTEM

» The goal is a digital ecosystem based on

- common standards, formats, usability, and interoperable structures
- digitization and connectivity to enable better access to educational services and offerings

» Attributes of the National Education Platform

- A so-called **meta-platform** is created, i.e., users only perceive the services as a functionality of the portal
- The platform offers all citizens the opportunity to receive individual **guidance, orientation, access, and participation** in learning scenarios
- Diverse educational offerings across the entire individual educational pathway - from **school to vocational training, university, and further education**



THE AIM IS TO CREATE A TECHNICAL ECOSYSTEM THAT ENABLES DIGITIZATION AND CONNECTIVITY

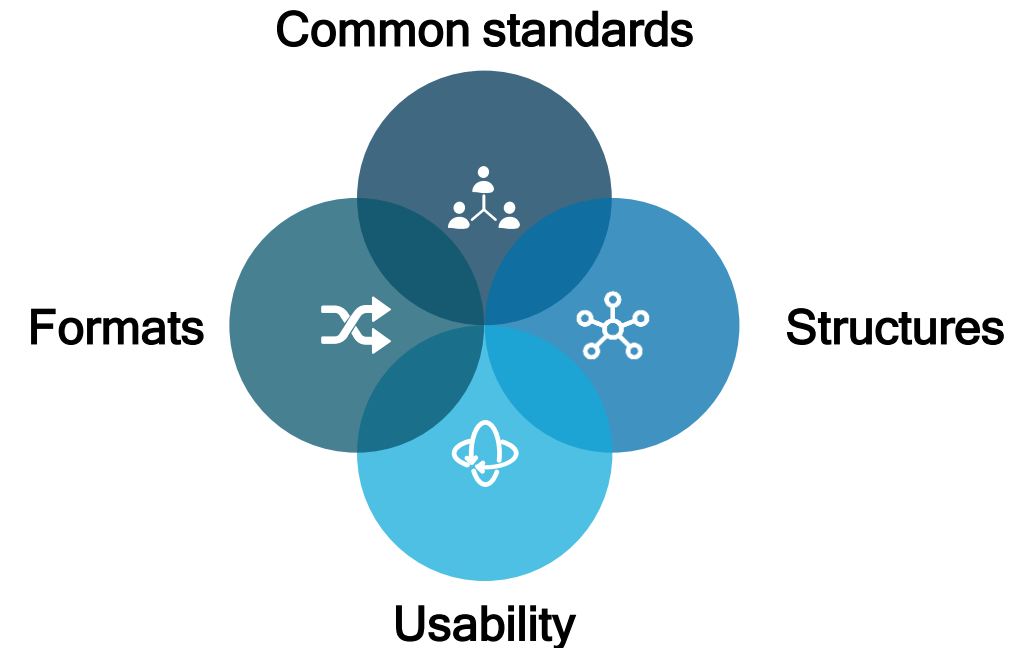


Functionalities and services

- The National Education Platform represents a **secure, smart connected system** that enables the **linking of decentralized content and data**
- Users can **access content, participate in collaborative teaching/learning scenarios** such as lessons, and **share information and results**
- **Individual proof of competence** (e.g., certificates, diplomas) can be stored digitized
- **Personal education profiles** can be stored, shared, and deleted - in compliance with **data protection regulations, self-sovereign** and across the entire educational biography
- The required **processes** are mapped in the background in a **legally secure and highly automated** manner



Success factors



Guaranteed data sovereignty of the users and data security

PERMANENT STRUCTURES ARE ESTABLISHED AND CONTINUOUSLY IMPROVED



With the National Education Platform, the **use of digital tools and connectivity** is intended to permanently improve the entire education area

Comprehensive interoperability

Stable and secure operating structures

Ongoing functional and qualitative improvements

Consistent usability and sovereignty

Ongoing technological innovation

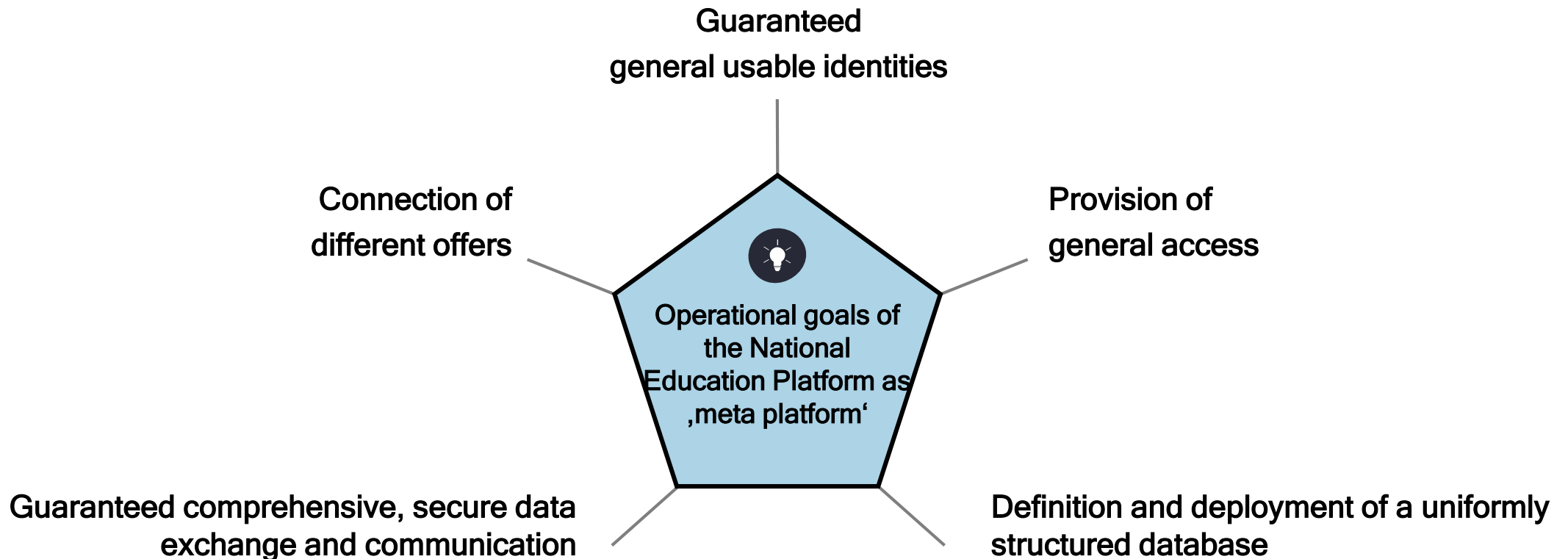




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02 FIELDS OF ACTION

THE FUNCTIONS OF THE EDUCATIONAL PLATFORM ARE GUARANTEED BY SPECIFIC FIELDS OF ACTION



For these fields of actions, the National Education Platform must create suitable **governance** and a **set of rules** that permanently safeguard interoperability, operational as well as user-oriented and technological further development

GENERAL USABLE IDENTITIES GUARANTEE A HIGH LEVEL OF INTEROPERABILITY

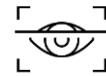
Guaranteed general usable identities

Provision of general access

Definition and deployment of a uniformly structured database

Guaranteed comprehensive, secure data exchange and communication

Connection of different offers



The Education Platform is intended to create the conditions for a **uniform, general identity management** in the education sector across all user groups and roles



For this purpose, the Education Platform **opens and connects** corresponding **authentication services**

PROVIDING GENERAL ACCESS IS REQUIRED FOR A USER-CENTERED IMPLEMENTATION

Guaranteed general usable identities

Provision of general access

Definition and deployment of a uniformly structured database

Guaranteed comprehensive, secure data exchange and communication

Connection of different offers



The Education Platform orchestrates **physical, digital, and mobile cross-media access to applications** across different user stories

THE NATIONAL EDUCATION PLATFORM SUPPORTS THE ESTABLISHMENT OF UNIFORM DATA STANDARDS

Guaranteed general usable identities

Provision of general access

Definition and deployment of a uniformly structured database

Guaranteed comprehensive, secure data exchange and communication

Connection of different offers



Uniform data structures and structured databases are the prerequisites for comprehensive, interoperable end-to-end processes and the exchange of data and information between different services



Uniform, overarching data standards for the whole education sector (e.g., XBildung) are established on a broad scale through the education platform



Data standards are also to be co-designed in an interoperable manner in the **European and international context**

DATA COMMUNICATION AND EXCHANGE ARE KEY ELEMENTS OF THE NATIONAL EDUCATION PLATFORM

Guaranteed general usable identities

Provision of general access

Definition and deployment of a uniformly structured database

Guaranteed comprehensive, secure data exchange and communication

Connection of different offers



For digitally supported services in the education sector, the education platform establishes comprehensive **user self-sovereignty** for the **communication and exchange of data**



Certificates and other digitally issued **proof of competency**, as well as other user-specific history data, are handled and shared in a **legally secure and controlled** way via a wallet or similar function

BUNDLING DIFFERENT SERVICES SUPPORTS THE OVERARCHING USER JOURNEY

Guaranteed general usable identities

Provision of general access

Definition and deployment of a uniformly structured database

Guaranteed comprehensive, secure data exchange and communication

Connection of different offers



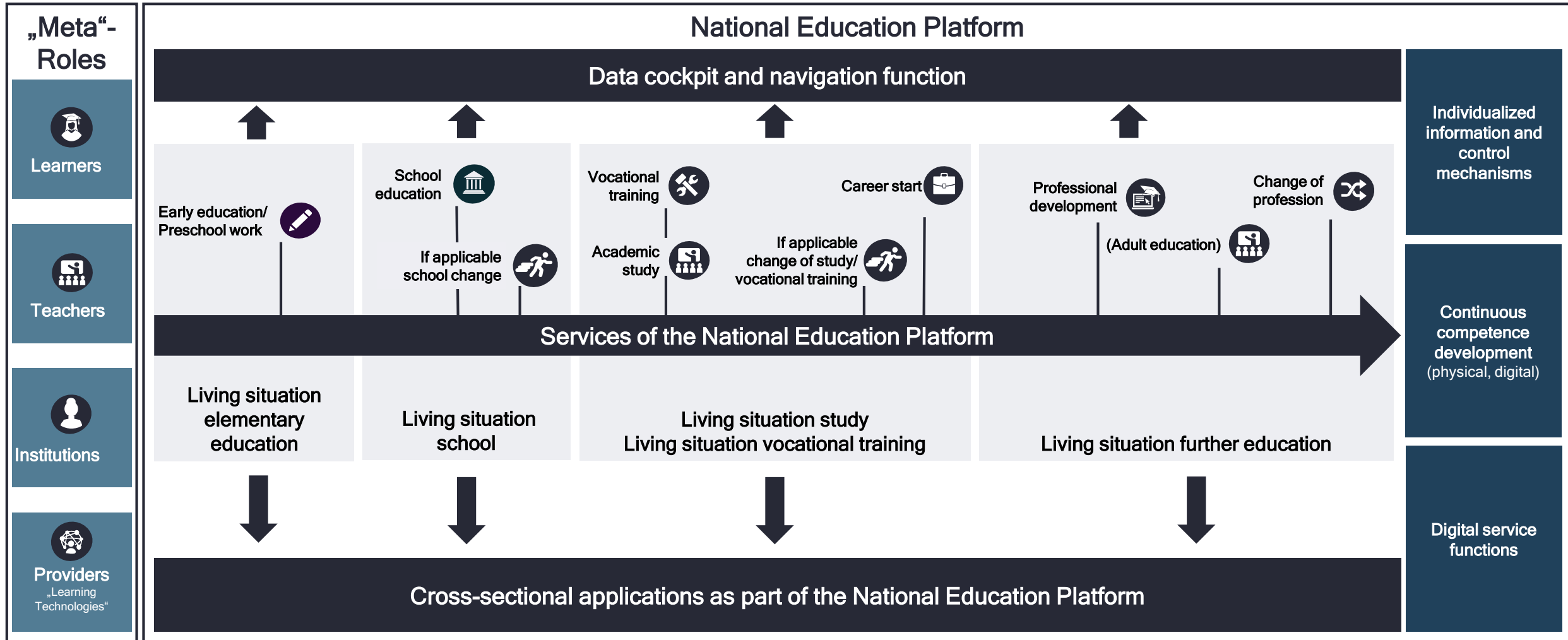
Uniform interfaces used by the Education Platform ensure **comprehensive integration** and **operability** of the offerings of private and public educational institutions as well as provide and support **overarching user experiences**



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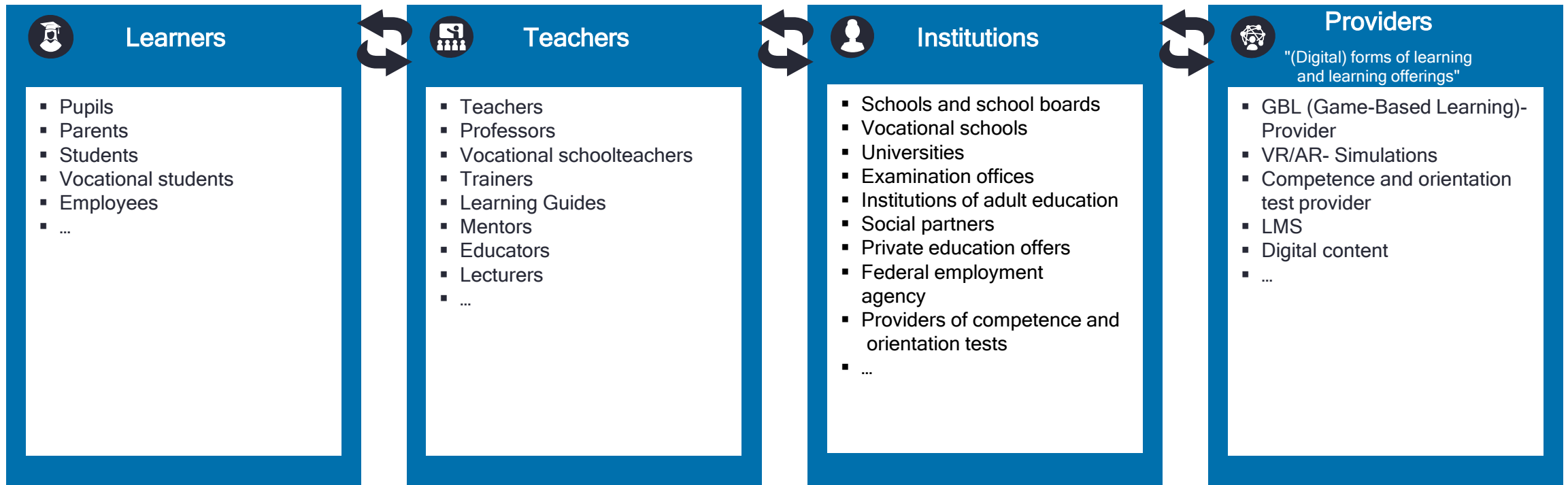
03 USER JOURNEY AND ROLES

THE NATIONAL EDUCATION PLATFORM IMPROVES AND SIMPLIFIES DIGITALLY SUPPORTED PARTICIPATION IN EDUCATION



DIFFERENT ROLES COME INTO PLAY IN THE VARIOUS EDUCATIONAL STATIONS

Roles and stakeholders of the National Education Platform



The list of sub roles is not exhaustive and names them only as examples

VARIOUS DIGITALLY SUPPORTED SERVICES ARE TO BE MADE ACCESSIBLE IN A NETWORK VIA THE PLATFORM

Life situation elementary education

Services

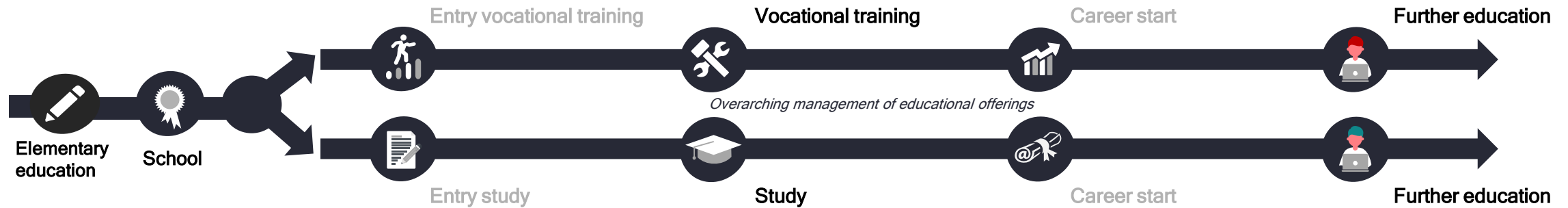
- Information and orientation
- Use of early development offers
- Preparation for school
- ...

Life situation vocational training

Services

- Information and orientation
- Preparation of vocational training
- Networking
- Use of educational offers
- Admission to vocational school*
- Support for vocational training
- Vocational training allowance and training allowance
- ...

*Administrative services



Services

- Information and orientation
- Admission
- Use of education offers
- School exam
- School diploma
- Change of school
- Cost reimbursement
- ...

Life situation school

Services

- Information and orientation
- Networking
- Use of education offers
- University admission
- Digital certificates
- Change of university
- Recognition of educational qualifications
- Allocation of study places
- Enrollment (& ex-matriculation)
- Accreditation and recognition of study periods and study achievements
- University diploma
- BaföG
- ...

Life situation study

Services

- Information and orientation
- VHS Bookings
- Training-, continuing education and further education offerings
- Education voucher
- Funding of further education
-

Life situation further education



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04 PROJECT ORGANIZATION AND PROJECTS

THE GOALS OF THE NATIONAL EDUCATION PLATFORM ENSURE END-TO-END INTEROPERABILITY AND INTEGRATION CAPABILITY



Goals of the National Education Platform

Goal 1 & 2

Development of digital teaching and learning scenarios for learners and teachers

The National Education Platform is to be used to (further) develop offerings for learners and teachers and make them accessible. **Digital teaching and learning scenarios** are to create methodological knowledge and digital competence on the part of teachers in all education systems.

Knowledge of methods and development of innovative teaching / learning concepts

To test and validate these basic architectures at an early stage and in a practical manner as part of an agile procedure, digitally supported **educational offerings** that draw on the **networking functions of the National Education Platform in a user-centric manner** are to be developed or adapted for this purpose. These can be existing and/or new curricula as well as teaching and learning offerings that are compatible with the specific requirements of the National Education Platform using clearly defined processes and standards.

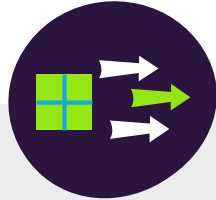
Goal 3

Access to teaching / learning development via competitively created prototypes

The development of **prototypes** for a National Education Platform as part of a distributed **digital service infrastructure** that follows common rules is to be funded. To enable access and integration of teaching and learning offerings, basic architectures are to be designed first, which guarantee the requirements for **interoperability, security, and transparency** and must be available at the end of the funding phase as prototypes or minimum viable products, or at least as technical proofs of concepts.

CHOSEN GOAL 3 PROTOTYPES

DURATION 4 MONTH (20.09.2021 - 19.01.2022)



L³OOP

This platform project describes the bringing together of different educational offerings to enable user-centric, data-sovereign, lifelong learning.

Strong reference to GAIA-X

Stakeholders

- imc AG
- FernUniversität Hagen



mEDUator

The focus of this project is the test extension of the National Education Platform or further development and unification of BIRD and Fraunhofer mEDUator.

Wide experience through Fraunhofer Common Learning Middleware

Stakeholders

- Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.



KOLIBRI

The focus of the platform architecture is on the integration of existing individual solutions with a focus on schools; the storage of identities and certificates is planned and the integration of an LMS is conceived.

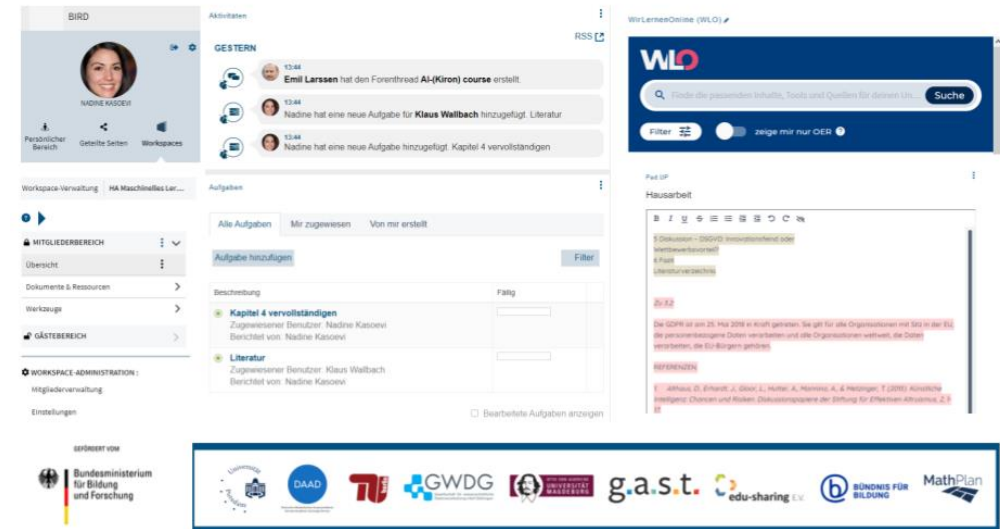
Strong consortium with extensive prior experience

Stakeholders

- Bechtle AG
- Dataport
- Univention GmbH
- Hochschule Harz

DETAILS ABOUT THE DIGITAL EDUCATION SPACE (BIRD)

- Focus: Development of the **technical backbone**
- Goal: **Test infrastructure** for the integration of existing portal solutions and learning offerings and the interoperability of the three other platform prototypes
- BIRD as exemplary **Communication and collaboration environment**



BIRD Collaboration partners

- University of Potsdam (Chair for Complex Multimedia Application Architectures)
- German Academic Exchange Service e.V., Registered Association, Berlin and Bonn
- Technical University of Berlin
- Göttingen Society for Scientific Data Processing
- Bochum Society for Academic Study Preparation and Test Development (g.a.s.t.) e.V., Registered Association
- edu-sharing e.V., Registered Association, Weimar
- Alliance for Education (Bündnis für Bildung e.V.), Registered Association, Berlin
- MathPlan GmbH, Berlin
- Otto von Guericke University of Magdeburg

The BIRD approach in detail

BIRD tries to support as many standards as possible (EDCI, ELMO, Verifiable Credential, X-University, X-Education, X-School, Europass, Open Badges, ...). The basis for this is the open-source framework "Liferay" used at the University of Potsdam, which can also be used to connect other environments or services. The connection is made via the three components: Single Sign-On, Data Wallet Connector, and Metadata Connector

Wallet

Anmelden

Mit Serlo Account:

Username oder E-Mail Adresse

Passwort

oder über die Bildungsplattform:

Weiter mit BIRD

Bist du neu hier?
Willkommen!
Hier kannst du einen Account anlegen

Klappt nicht?
Passwort vergessen
oder Account noch nicht aktiviert?

Yeah, du hast den Kurs durchgearbeitet. Du kannst deinen Lernfortschritt jetzt speichern.
Oder du probierst dich noch mal an der Übung

In deiner Wallet speichern

Eigenen Lernstand laden

Hier kannst du deinen Lernstand aus deiner **BIRD Data-Wallet** laden. Wenn du das noch nie gemacht hast, wir eine [ausführlichere Anleitung](#) für dich.

QR-Code zum freischalten



Nachdem du den Code mit der **Enmeshed** App gescannt hast erscheint hier gleich dein Lernstand.

Zugriff auf Data-Wallet einrichten

Profil 10

Relevant Alle

- B** BIRD
Ausgehende Kontaktanfrage
- SE** Serlo Education e.V.
Ausgehende Kontaktanfrage

Kontakt hinzufügen

Start | Teilen | **Kontakte** | Daten

Businessplan

Übersicht

Oersi

OERSI

Landwirtschaftliche Praktiken

14 results found

SEARCH: LANDWIRTSCHAFTLICHE PRAKTIKEN

Subject	
Type	
License	
Author	
Organization	
Language	
Provider	

Landwirtschaftliche Praktiken

Dieser Beitrag ist auch verfügbar auf: English (Englisch) Español (Spanisch) Français (Französisch) Da die Weltbevölkerung bis 2050...

SSO

Nachhaltigkeit

Rinologie

Chemie

Informatik

Fächer im Aufbau

Tools/Apps

LINKAGE AND COORDINATION WITH OTHER RELEVANT PROJECTS AND INITIATIVES

PIM

Digitizable recognition of examination results

DiBiHo

Store, share, and verify digital higher education credentials (PoC)

KI-Campus

Digital platform for education on the topic of artificial intelligence

Europass

Cross-border exchange and verification of educational certificates via the EDC exchange format

Digitaler Campus

Portal for information and recruitment as well as linguistic, professional and cultural preparation of international students

INVITE

The innovation competition INVITE (Digital Platform for Continuing Vocational Education and Training) is intended to contribute to the optimization of an innovative digital educational space for vocational continuing education and training

NOW

Establishment of a national online continuing education platform under the leadership of the BMAS together with the Federal Employment Agency

VIDIS

Mediation service for digital identity management in schools as an operational switchboard between identity providers and service providers

MERLOT

Creation of specially protected educational data spaces and services within the GAIA-X ecosystem

OECD

Exchange and cooperation in the context of the study "Getting Skills Right - Continuing Education in Germany"

MODUS

Strengthening recognition and crediting practices at universities for better mobility and interchangeability

ACROSS

Framework for accelerating the digital revolution in Europe

Ongoing monitoring to link further projects and initiatives

National Education Platform

Current status

The BMBF and the project executing agency/project office are in constant exchange with the projects and initiatives mentioned and initial bilateral talks have already taken place.

Stakeholder process

The identification and analysis of relevant stakeholders have been started and a concept for the dialogue and participation of further stakeholders is in progress.

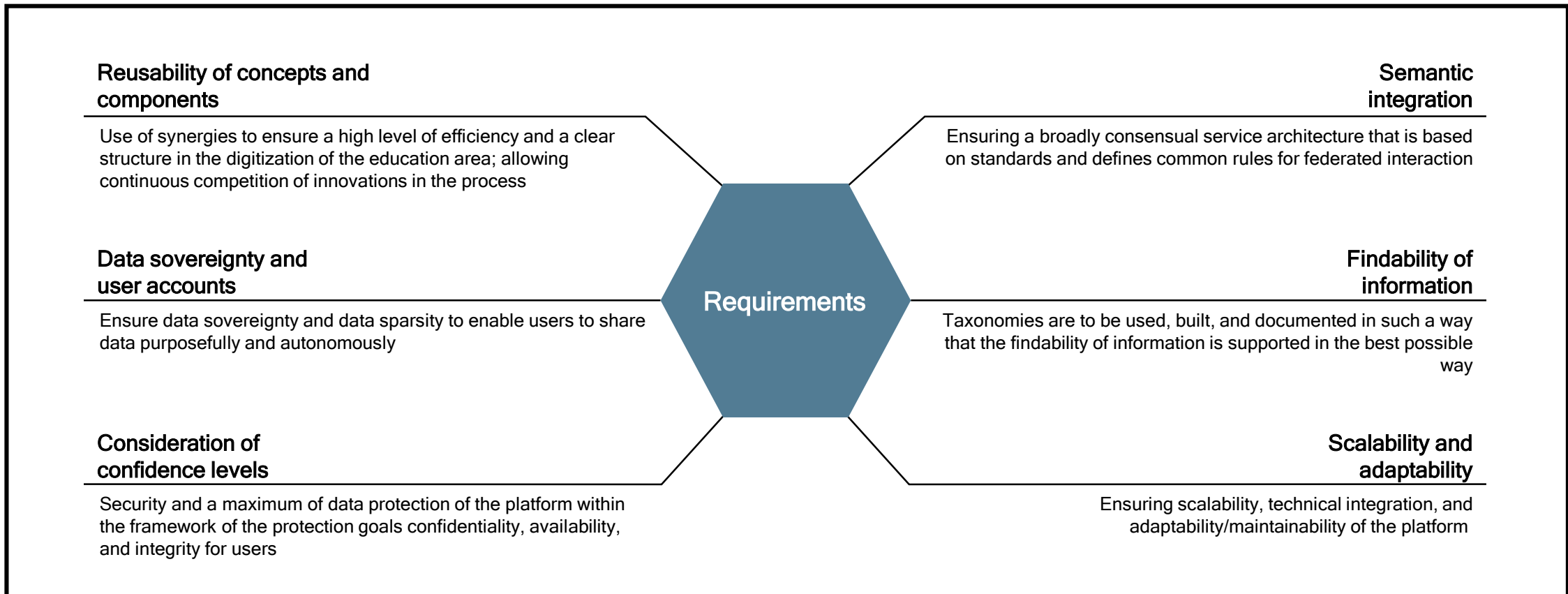


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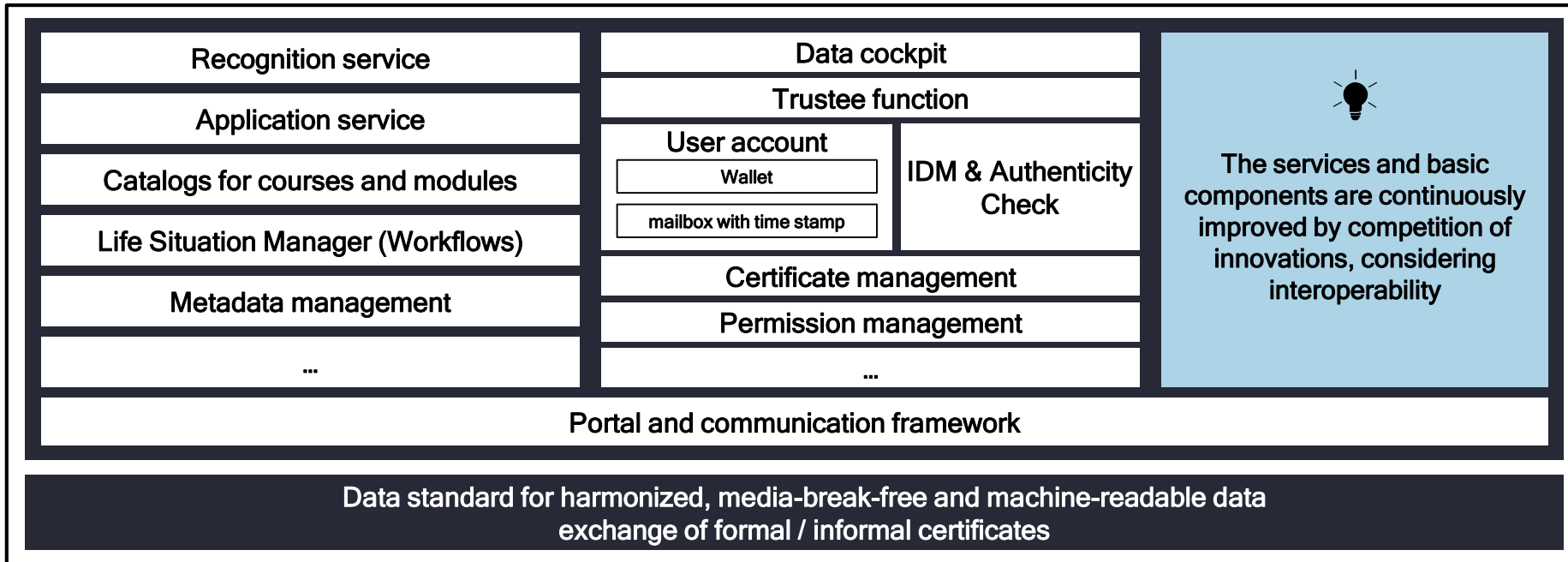
TECHNICAL IMPLEMENTATION / REQUIREMENTS

MAIN OVERARCHING REQUIREMENTS THAT MUST BE MET FOR THE NATIONAL EDUCATION PLATFORM ALIGNMENT



REUSABLE SERVICES AND BASIC COMPONENTS ARE SUCCESSIVELY DEVELOPED FOR THE ENTIRE EDUCATIONAL AREA

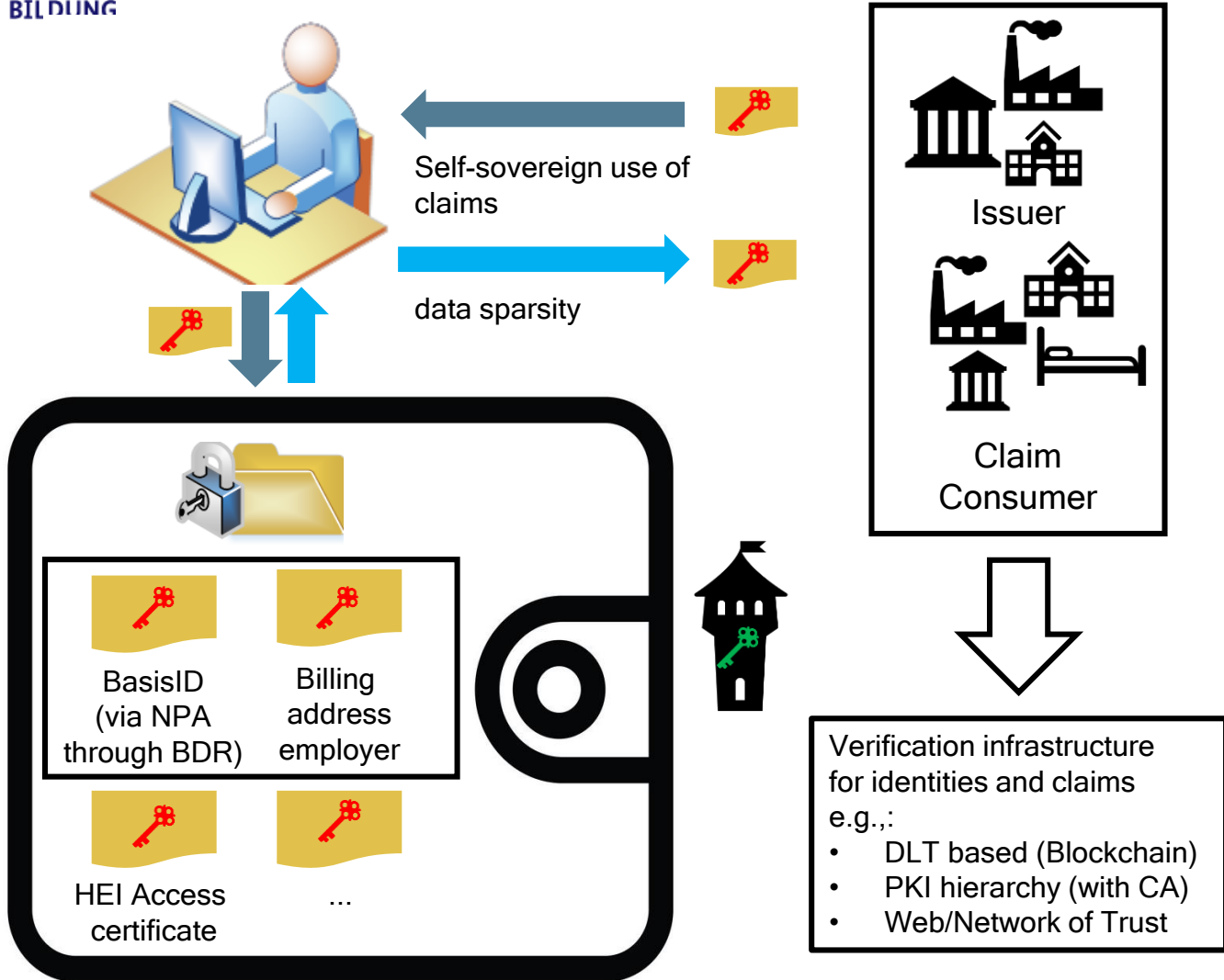
 Reusable services & basic components using higher education as an example:



 Continuous need for integration 

Suitable OZG / SDG post-use models
(legal, functional / organizational, technical, semantic)

WALLETS ARE THE CORE FOR THE SELF-SOVEREIGN HANDLING OF OWN DATA



The **purpose** of a wallet is to store the **SSI features** that allow only required information to be presented to third parties in a secure and private manner.

BIRD Project

Use Case:
Transfer of materials and personal data

Claims:
Identity and profile competence assignments
credentials, certificates, learning outcomes

Verification infrastructure:
"Network of Trust"
(Issuer, holder and auditor)

Issuer for claim:
Universities, education provider

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