RALExILA

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The Essential Guide to ALE National Registries - Key Takeaways

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RALExILA - The Essential Guide to ALE National Registries Key Takeaways

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Authors	Aneta Golebiowska, Elena Pavić, Leo Mršić (Algebra University) Stefan Jahnke, Jasmina Poličnik (Knowledge Innovation Center) Viola Pinzi, Angeliki Giannakopoulou (European Association for the Education of Adults - EAEA) Xanthia Aristidou (Center for the Advancement of Research & Development in Educational Technology - CARDET) Klaudius Šilhár (Asociácia inštitúcií vzdelávania dospelých v Slovenskej republike - AIVD
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1. What is this Handbook for?

This is a summary version of the RALExILA - The Essential Guide to ALE National Registries, which presents the key takeaways.

The Handbook aims to be the ultimate guide to develop national registries of adult education opportunities and Individual Learning Accounts platforms that are accessible and interoperable, within and across European Member States.

It serves as a practical and conceptual guide for policymakers, practitioners, and stakeholders engaged in the co-design, implementation, and management of such systems.

The Handbook is composed of four parts.

- Part 1 - General principles for ALE ecosystems and ILA as an instrument and related tools (ALE registries and ILA platforms)
- Part 2 - Design and technical aspects of ALE registries and ILA platforms
- Part 3 – A playbook to support the whole co-designing process for ALE registries and ILA platforms in a specific country
- Annexes – The full set of tools used to implement the RALExILA co-design process across research, development, and piloting phases

2. What is RALExILA?

RALExILA is an initiative co-funded by the European Union born to develop a model for national registries for adult education to support the implementation of individual learning accounts in European countries.

The RALExILA approach proposes a foundational model that is scalable at national level across Europe, promoting knowledge exchange among countries and stakeholders. The model includes two main components: the registry of adult education learning opportunities (ALE registry) and the individual learning account platform features (ILA platform).

The model can be one of the core components of the foundational digital ecosystem to support the European skills ecosystem.

An ALE registry and ILA platform develop according to this approach can:

- Serve as a reliable tool for monitoring participation, supporting planning, and reducing fragmentation in ALE systems.
- Provide data for future forecasting tools and instruments.
- Support system governance through system analysis, benchmarking of learning outcomes, and data on skills gaps.
- Support financial management through monitoring of fund allocation and financial transactions.

3. What are ALE registries and ILA platforms?

The RALExILA model emerges in response to the growing recognition of the pivotal role ALE registries and ILA-like instruments play in fostering lifelong learning, improving workforce adaptability, and addressing societal challenges such as digitalization and demographic shifts.

While ALE registries provide essential frameworks for tracking participation, outcomes, and quality assurance, ILAs offer mechanisms for empowering individuals to make informed and autonomous learning decisions. Together, these instruments contribute to the European Union's strategic objectives for inclusive education and upskilling.

What is an ALE registry?
An ALE registry is a system or platform that collects, organises, and makes accessible information about learning opportunities for adults.

It is designed to help adults find relevant courses, programmes, and resources to improve their skills, knowledge, and qualifications.

What is an ILA platform?
Online platform with features to manage funding or credit (allocate and use) and personal accounts with information on programmes and achievements, through public, private or hybrid funding.

Why they are important?
In summary, **ALE registries and ILA platforms constitute foundational instruments to support inclusive and accessible lifelong learning ecosystems in Europe.**

They are central tools of information and functionalities that connect learners, providers, and policymakers, also addressing core challenges related to accessibility, quality, and alignment of learning opportunities with individual and societal needs.

ALE registries functions

- Enhance accessibility to learning opportunities (user friendly, multilingual, centralized, easy navigation)
- Supporting quality of information and data (quality and consistency of information, usefulness, and relevance of information, updated and accurate records, data on participation and impact)
- Support inclusivity and equity in education (accessible, tailored, inclusivity by design)
- Data-driven decision making (participation, programme, outcomes, demographics)
- Contribute to the sustainability of lifelong learning (overview of opportunities and resources, gaps and overlaps, investment)

ILA platforms functions

- Enhance efficiency, flexibility, and accessibility to funding and to learning opportunities
- Offer targeted support to individuals with a centralized one stop shop for discovering opportunities (ALE registries) and individual funding management
- Allow transparent and accurate information on quality, eligibility, fund allocations
- Collect feedback from learners (diverse modality, with quantitative and qualitative methods)
- Data - driven decision making (participation, programmes outcomes, financial investment, topics.

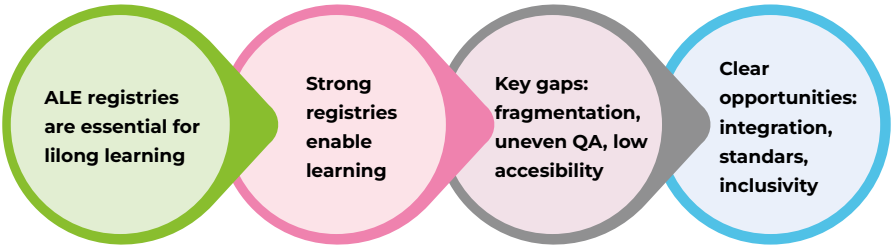

Figure 1 – Main functions and benefits for ALE registries

4. How was the RALExILA model developed?

The RALExILA co-design approach and its system model were developed through a two-year long design thinking process.

In the first phase, the multi-country research explored the implementation and effectiveness of ALE registries and ILAs across ten European countries. The study focused on four core countries, (Croatia, Slovakia, Cyprus, and Malta), and extended its analysis to six additional countries (Finland, Ireland, the Netherlands, Portugal, Slovenia, and France).

To ensure the model is user-centred and applicable, in the second phase, four dedicated co-design workshops enabled a collaborative exploration of stakeholders' needs, system functionality, and implementation pathways. Through iterative, collaborative problem-solving, these workshops helped shape a model that responds directly to the needs of learners, training providers, and policymakers.

Finally, in the last phase, another set of co-design workshops were conducted in the four main countries, to evaluate and refine the system model with stakeholders.

The core results of the initial research are also available in the report Building ALE National Registries in Europe – Frameworks, insights and needs for supporting individual learning accounts.[1]

[1]Gołębiowska, A., Mršić, L., Pavić, S., Pinzi, V., Pelucco, G., Steinkampf, L., Jahnke, S., Poličnik, J., Aristidou, X., & Šilhár, K. (2024). "Building ALE National Registries in Europe – Frameworks, insights and needs for supporting individual learning accounts. Algebra University.
http://ralexila.eu/wp-content/uploads/sites/91/2025/05/Ralexila_Del-2.1_FIN_EN.pdf

5. The building blocks: Governance and Quality assurance in ALE systems

Quality assurance (QA) provides the trust and transparency on which all effective lifelong learning systems depend. It ensures that learning opportunities remain relevant, reliable, and accessible in a context where technologies, skills requirements, and user expectations are continually evolving. Today, QA is not only about meeting standards; it also supports innovation, inclusion, and the transition towards more digital, user-centred learning environments.

At the same time, no ALE system can function without clear and coherent governance. **Governance defines how responsibilities are allocated, how decisions are made, and how different actors – ministries, agencies, providers, employers, and learners – collaborate.** ALE depends on cooperation across many levels, so transparent and well-structured governance is essential to keep systems adaptable, equitable, and aligned with social and economic needs.

Together, QA and governance create the framework within which ALE registries and Individual Learning Accounts (ILAs) can operate effectively. They determine how information is managed, how quality is assured, and how learners are supported in navigating diverse learning pathways.

The Handbook examine these foundations in depth:

- principles that define quality and their application across ALE registries and ILAs;
- governance models and the roles of the different actors involved, and
- current landscape of European ALE registries and ILA platforms.

5.1. QUALITY ASSURANCE IN ALE REGISTRIES

ALE registries - that make learning visible - and ILA platforms - that make it affordable - depend on robust and transparent quality systems to function as trusted public assets.

ALE registries and ILA platforms are not merely databases: they are dynamic systems that connect learners, providers, and policymakers through data, transparency, and trust. Quality in adult learning is not a static standard either: it is a dynamic process that builds trust, transparency, and inclusion.

QA in ALE ensures that learning opportunities respond to the needs of individuals, employers, and society, while maintaining high standards of accessibility, inclusivity, and relevance. Quality assurance gives these systems credibility, coherence, and a human focus, ensuring that learning opportunities are visible, meaningful, and fair.

5.1.1 Core principles of quality assurance

Effective QA in ALE and ILAs is based on a few universal principles. Together, these form the foundation for trustworthy, transparent, and inclusive lifelong learning. Each principle reinforces the others, ensuring that ALE and ILA systems are coherent, inclusive, and trusted.

Transparency and reliability
Help learners make informed choices and build trust among providers, policymakers, and the public.

Accessibility and inclusiveness
Ensure that everyone can participate in lifelong learning, regardless of background or ability.

Relevance and alignment
Connect education with real labour market needs and broader policy goals.

Accountability and continuous improvement
Ensure all actors understand their roles and use feedback for continuous improvement.

Stakeholder engagement
Ensure QA systems remain relevant, trusted, and grounded in real needs.

Data-driven decision-making
Use data and evidence as the basis for improvement and accountability.

5.1.2 Who ensures quality and how?

QA in ALE and ILA systems operates across several interconnected levels. Each level has its own mechanisms and actors, but together they form a single ecosystem linking local learning experiences with national and European policy goals.

In many countries, this also includes using broader monitoring tools, such as balanced scorecard approaches, and regularly reviewing skills taxonomies to ensure that non-formal learning remains aligned with labour market and societal needs.

- **Providers** - conduct internal quality reviews and ensure compliance with national standards.
- **QA Agencies** - conduct accreditation, audits, and external evaluations.
- **Ministries** - coordinate policy, oversee funding, and ensure system coherence.
- **Learners & Employers** - contribute feedback that shapes relevance and improvement.
- **EU and international bodies** - offer frameworks and comparability tools such as EQAVET or ISO standards.

5.1.3 Building effective collaboration and a culture of quality

Quality improves when dialogue is continuous. Systems that actively link feedback from learners to policymaking and funding decisions achieve greater responsiveness and credibility. Ultimately, quality arises from dialogue among those who teach, those who learn, and those who govern.

QA in ALE and ILA systems is not merely a matter of rules or formal checks. **A genuine quality culture requires everyone involved – from providers and ALE registries to learners and policymakers – to regard improvement as a shared, ongoing responsibility.**

Effective QA links the learner's experience to institutional accountability, transforming information into improvement.

Effective QA begins within institutions, not outside them. It develops through daily routines, reflection, and shared standards. When QA becomes part of the workflow, it builds trust and motivation and narrows the gap between policy design and classroom reality.

Collaborative governance ensures that QA is not only a control mechanism but also a shared responsibility.

5.1.4 Building a connected quality ecosystem

QA in ALE and ILA systems should not function in isolation. Instead, it should form a coordinated ecosystem where:

- ALE systems define strategic quality frameworks;
- ALE registries ensure transparency and comparability;
- ILAs reinforce accountability through funding;
- ILA platforms enable data collection and learner engagement.

5.2. GOVERNANCE MODELS FOR ALE REGISTRIES AND ILAS

Governance defines how ALE systems operate – who decides, who delivers, and who ensures that quality, transparency, and accountability are upheld.

Strong governance translates policies into practice. It aligns institutions, builds trust among stakeholders, and ensures that resources are used efficiently and equitably.

In the context of ALE, effective governance spans four interconnected dimensions: the ALE ecosystem, ALE registries, ILA instruments, and ILA digital platforms. Together, these form the operational backbone of lifelong learning systems.

Governance in ALE is not only an administrative structure; it is a mechanism that ensures coherence, fairness, and trust. It links national strategies with local implementation and translates principles such as transparency and inclusiveness into measurable actions. Good governance strengthens the efficiency and credibility of lifelong learning systems.

5.2.1 Core principles of governance

Common foundational principles apply across all four dimensions of ALE. They determine how decisions are made, how responsibilities are distributed, and how quality is maintained.

Transparency
Transparency ensures that decision-making, resource allocation, and accreditation processes are visible and understandable to all involved. In transparent systems, learners, providers, and policymakers have access to the same reliable information.

Accountability
Accountability establishes clear responsibilities at every level of governance. Each actor, from ministries to digital platform managers, must be answerable for the quality and outcomes of their work.

Participation
Participation ensures that governance reflects actual needs. Stakeholders – learners, providers, employers, and civil society – contribute knowledge that makes ALE systems more relevant and adaptable.

Inclusiveness
Inclusiveness ensures that governance is equitable and able to address the needs of all learners, especially those facing barriers related to geography, disability, age, migration background, or socio-economic status.

Continuous Improvement
Governance in ALE must evolve continuously. Monitoring, evaluation, and feedback enable adaptation to new social, technological, and economic conditions.

5.2.2 Who governs the governance?

Effective governance in ALE depends on cooperation among multiple actors and levels, from ministries to individual learners. Good governance involves not only structure but also communication, accountability, and shared responsibility. When each actor understands its role, and when data and feedback circulate freely, systems become coherent and adaptive.

Governance is often visualised as a pyramid, but in practice it should function more like a network with constant feedback loops. Quality, efficiency, and inclusiveness depend on how smoothly this exchange operates.

ALE ecosystems operates in a logic of multi-level governance across six interconnected levels and each level contributes to transparency, accountability, and continuous improvement.

- **Ministries and Central Authorities** > Set strategic direction and allocate public resources, including funding for provision delivered by both public and non-public organisations.
- **Quality Assurance Agencies** > Define and monitor standards
- **Registry Operators** > Verify provider status and programme information; ensure that ALE registries are reliable, interoperable, and open
- **ILA Administrators** > Oversee funding, eligibility, and user guidance
- **Providers** > Deliver learning services
- **Learners and Employers** > Act as end-users and evaluators

Good governance recognises that public responsibility extends beyond public institutions, supporting a diverse range of providers, including NGOs, community organisations, private training centres, and employer-led programmes.

5.2.3 Towards collaborative governance

Modern ALE governance is shifting from hierarchical control to collaborative partnership. Instead of a single central authority directing all actions, effective systems establish feedback cycles that allow evidence from practice to inform policy. Learner feedback, provider reports, and ALE registry data are not merely statistics; they are governance tools.

Governance is most effective when everyone can see how their actions contribute to the system's improvement.

Core principles of collaborative governance

- Trust and transparency – open information sharing between institutions and the public.
- Mutual accountability – clear responsibilities, supported by data validation and performance tracking.
- Evidence-based policymaking – decisions grounded in data from ALE registries and ILA platforms.
- Continuous learning – regular review and adaptation of frameworks based on feedback and innovation.

5.2.4 Governance across the connected ecosystem

Governance must operate as a coherent framework across the four systems: ALE ecosystem, ALE registries, ILA instrument, and ILA digital platforms. Each of these dimensions has a distinct role but relies on the others to function effectively. Together, they form a continuous loop that links policy intent, implementation, monitoring, and improvement.

ALE ecosystem: policy and strategic coordination
The ALE ecosystem constitutes the strategic layer of governance. It establishes the national vision for ALE, defines priorities, and links ALE with broader education, labour market, and social inclusion policies. Its effectiveness depends on coordination among ministries, agencies, and regional authorities.

ALE registries: transparency and data integrity
ALE registries serve as the transparency layer of the ALE ecosystem. They convert policy and quality standards into public, accessible information about eligible providers, learning opportunities, and pathways. Effective governance ensures that registries are reliable, up to date, and interoperable with other national systems.

ILA Instruments: funding, fairness, and quality
ILAs form the financial and operational layer of governance. They place the learner at the centre by linking funding directly to participation in quality-assured programmes. Good governance ensures that financial mechanisms promote fairness, accountability, and results, not just access.

ILA Platforms: digital governance and user trust
ILA platforms form the technological and interface layer of governance. They make the system visible, interactive, and user-centred. As digital public services, they require robust governance for data protection, usability, and ethical design.

5.3. ALE REGISTRIES AND ILA PLATFORMS: WHAT DOES EXIST IN EUROPE?

The RALExILA research provides an overview of how Adult Learning and Education (ALE) registries and Individual Learning Account (ILA) platforms function in ten European countries (Croatia, Slovakia, Cyprus, Malta, Finland, Ireland, the Netherlands, Portugal, Slovenia, and France).

The examples illustrate current practices and how different countries address transparency, funding, and inclusion in adult learning.

The focus is practical and comparative:

- How countries organise and govern their ALE registries.
- How QA mechanisms are integrated.
- How digital tools support learners and providers.

The analysis covers countries that reflect a range of governance traditions, technological maturity, and ALE priorities.

Three main typologies were observed that are shaped not only by policy choices but also by demographic, territorial, and administrative contexts.

- **Centralised systems** typically found in smaller or more administratively uniform states, where coherence and oversight are easier to maintain.
- **Decentralised systems** more common in countries with strong regional identities or federal structures, where local responsiveness is a priority.
- **Hybrid systems** which combine national coordination with regional or sectoral adaptability.

5.3.1 ALE registries models in Europe

Across Europe, the landscape ALE registries and ILA platforms is highly diverse. Some countries are still developing the basic infrastructure to ensure transparency and quality, while others have established advanced, interoperable systems that connect funding, data, and user services. This diversity reflects not only different policy traditions but also varied stages of digital maturity, institutional coordination, and public investment in ALE.

Despite these differences, several common trends are evident.

- The integration of QA frameworks and ALE registry functions is becoming the norm rather than the exception.
- Governance models are increasingly hybrid, balancing national coherence with local adaptability.
- ALE registries are evolving from static databases into dynamic platforms that combine course search, funding eligibility, and learner feedback.
- Many countries are exploring ILA-type instruments, linking individual financing with quality-assured provision.

Across the ten countries analysed, three main ALE governance models – centralised, decentralised, and hybrid or integrated – broadly correspond to three levels of registry maturity: basic, intermediate, and advanced.

Basic Registries – Foundations of trust and transparency
Countries: Croatia, Malta, Slovakia
Basic ALE registries focus on visibility and control. Their role is to provide reliable information on accredited providers and programmes, ensuring minimum quality standards and public trust. Managed centrally by ministries or national agencies, they serve as compliance tools rather than interactive systems.

While they ensure coherence and credibility, they often lack real-time updates, interoperability, and user-oriented features.

Intermediate Registries – Integration and accessibility
Countries: Cyprus, Slovenia, Ireland, Portugal
Intermediate ALE registries represent a transitional phase between control-oriented and user-centred systems. They introduce interactive features, connect partially with quality assurance and funding mechanisms, and begin collecting data for analysis. These ALE registries improve accessibility and coordination but still rely on manual updates and fragmented governance structures. Sustainability and interoperability remain key challenges.

Advanced Registries – Smart ecosystems for lifelong learning
Countries: Finland, Netherlands, France
Advanced ALE registries integrate data, funding, and QA into a single digital ecosystem. They enable real-time monitoring, transparent financing, and personalised learner support. Fully interoperable with labour market and represent the most mature form of governance, where registries serve as instruments for policy coordination and continuous improvement.

Their effectiveness, however, depends on sustained investment, robust data governance, and institutional trust.

The full case studies descriptions are available in the main version of the Handbook.

6. Developing ALE registries and ILA platforms

Beyond this Handbook, **the RALExILA approach for developing ALE registries and ILA platforms includes also:**

- **RALExILA Primer**[2], which introduces the co-design approach and phased prototyping roadmap; and
- **RALExILA System Model**[3], which defines conceptual information models, system capabilities, and interoperability principles.

The RALExILA System Model defines what information and system capabilities are required for a functioning ALE/ILA ecosystem and why they matter.

The Handbook focuses on how these elements can be implemented in practice, providing practical implementation guidance for designing and deploying registries and platforms, translating the Model into actionable guidance for policymakers, system owners, and technical teams, while deliberately avoiding prescriptive technical or architectural solutions.

Together, these documents form a coherent pathway from policy intent, through co-design and modelling, to system implementation and piloting.

[2]The RALExILA Primer is available in the full version of the Handbook
[3]Jahnke S., (2026). RALExILA system model - Developing interoperable registries of adult education in Europe. Knowledge Information Center. http://ralexila.eu/

6.1. KEY RESEARCH FINDINGS AND CORE FEATURES

The research and workshops identified critical gaps and opportunities in the development of ALE registries and ILA platforms.

The findings highlight the need for interoperability, user-centric design, quality assurance, and funding transparency, all of which directly inform the design principles and system architecture of the RALExILA System Model.

Fragmented ALE registries & limited interoperability
National ALE registries vary significantly in structure, accessibility, and interoperability. Many systems lack standardised data models, unified course directories, and seamless integration with European frameworks such as Europass, ESCO, and the European Learning Model (ELM). As a result, learners and training providers often struggle with inconsistent information, duplicated administrative efforts, and difficulties in recognising learning achievements across borders.

The RALExILA System Model addresses these challenges by defining a modular and scalable approach that supports standardised course discovery, provider validation or accreditation, and structured data.

Need for a more accessible and user-centric system
Existing ALE and ILA platforms are often complex and difficult to navigate, particularly for learners with low digital literacy or limited awareness of funding opportunities. Research findings indicate that many users struggle with confusing enrolment processes, unclear entitlement rules, and limited guidance on selecting appropriate training options.

To improve accessibility, the RALExILA System Model integrates learner-centred design principles, such as simplified user interfaces, personalised learning pathways and AI-driven course recommendations, and integrated learner feedback tools.

Quality Assurance gaps in non-formal learning
Quality assurance mechanisms remain inconsistent and diverse across countries, particularly for non-formal and informal learning. While many countries have established accreditation standards for formal education providers, the recognition of micro-credentials, skills acquired through work experience, and Recognition of Prior Learning (RPL), particularly for Adult Learning, is often fragmented. This can limit the recognition, portability, and employer recognition of non-traditional learning experiences.

RALExILA Model supports improved quality assurance through:

- Clear validation mechanisms for training providers and courses.
- ALE registry data model designed around micro-credentials models.
- Integration of RPL features into ALE registries.
- Course ratings and learner feedback to contribute to QA.
- Features suggesting automated compliance checks.

Complexity in funding and ILA management

Many learners and training providers face challenges related to ILA funding transparency, eligibility rules, and disbursement mechanisms. Research indicates that funding processes are often unclear and difficult to navigate, leading to confusion about how entitlements are allocated, which courses qualify for funding, and how payments are processed. Inconsistent rules and complex administrative requirements can deter learners from using ILAs effectively and create inefficiencies for training providers managing funding claims.

RALExILA Model introduces an ILA component data model to simplify and enhance financial processes. The model also proposes automated eligibility verification mechanisms and fraud prevention tools.

Need for policy support and data-driven decision making

Effective policymaking in adult learning and education requires real-time insights into learner participation, funding utilisation, and emerging skills gaps. However, many existing ALE and ILA systems lack the necessary analytics and reporting features to the impact of funding allocations. Without comprehensive data, policymakers struggle to make evidence-based decisions, adjust funding models, or anticipate future skills needs of adult learners.

RALExILA Model proposes interactive analytics dashboards that would allow policymakers to monitor system performance, learner engagement, and funding trends in real time. It also includes skills gap assessments and labour market alignment reports.

User needs assessment

A clear understanding of user needs is critical for designing effective ALE registries and ILA platforms.
Research conducted across ten European countries helped us identify the main user groups and is the basis for articulating the user-stories that plays a key role in establishing the RALExILA Model.

In the full version of this Handbook, the approach provides detailed description of identified user groups (learners, training providers, administrators, policy makers and funders), based on their roles, interactions, and needs within the learning ecosystem, the definition of the related user stories and, finally, proposed users' journeys for the systems.

6.2. ROADMAP FOR DEVELOPMENT AND ADAPTING SYSTEMS

6.2.1 Mapping, developing, and adapting national ALE/ILA systems

Developing or adapting ALE registries and ILA systems require a structured yet adaptable approach. Rather than following a rigid step-by-step model, national authorities should focus on four interrelated areas of action that together ensure a sustainable, transparent, and effective system.

Each country's starting point will differ - some may already have an ALE registry but lack a funding mechanism, while others may need to build a system from the ground up. Regardless of the context, national authorities will need to map their existing system, define governance structures, develop a robust technical framework, and ensure long-term sustainability.

Understanding the existing landscape
Before designing an ALE/ILA system, it is essential to assess the current infrastructure, policy environment, and stakeholder landscape.
This involves answering fundamental guiding questions:

- What systems are already in place?
- How do learners and providers currently interact with the system?
- What are the policy and regulatory constraints?

Defining the governance and funding model
Governance structures and funding mechanisms will determine how the ALE/ILA system operates, evolves, and remains accountable. A clear governance and funding model not only helps in efficient system operation but also builds trust among learners, providers, and policymakers.
Several key decisions need to be made:

- Who will oversee and manage the system?
- How will funding be structured?
- What mechanisms ensure transparency and accountability?

Developing the technical and interoperability framework

Once the governance and funding structures are in place, attention turns to technical implementation. By addressing following questions early, national authorities can ensure that their technical infrastructure supports long-term growth and integration with broader education and employment systems.
Designing a system that is interoperable, user-friendly, and scalable requires careful planning in several areas:

- What data infrastructure is needed?
- How do different systems communicate?
- How will users interact with the system?
- What reporting and analytics tools are needed?

Ensuring long-term sustainability and system evolution

The final consideration is how the system will remain effective and relevant in the long term. By embedding ongoing evaluation and adaptation into the roadmap, national authorities can ensure that their ALE/ILA system remains relevant, effective, and aligned with long-term policy goals.

Systems that are not actively maintained, updated, or aligned with policy shifts risk becoming outdated or underutilised.

- How will the system be evaluated and improved?
- What mechanisms will ensure financial sustainability?
- How will digital and policy advancements be incorporated?

6.2.2 Step-by-step modular implementation approach

The RALExILA System Model follows a modular approach also in terms of implementation of the digital systems, allowing for gradual development based on national priorities and available infrastructure.

Phase 1: Establishing a core ALE registry (Foundational Components)
For countries that do not yet have a structured ALE system, the first step is to establish a digital registry that centralises verified course and provider information.

Phase 2: Expanding the system with ILA integration
Once the ALE registry is operational, the next step is to enable learners to manage individual learning entitlements through an ILA system.

Phase 3: Enhancing the system with advanced features
For countries that have an established ALE and ILA framework, further enhancements can improve personalisation, analytics, and cross-border recognition.

6.2.3 Capability maturity model for ALE/ILA systems

To help practitioners assess their current system maturity and identify priority actions, **the RALExILA approach is based on a Capability Maturity Model**, to provide a structured way to determine which capabilities should be implemented and when.

- **Basic** (ALE Registry Only) - A central registry exists but lacks ILA integration. No automated funding or quality assurance.
- **Intermediate** (ALE + ILA Integrated) - Learners can access ILAs and funding, but quality assurance and analytics are still underdeveloped.
- **Advanced** (Fully Digital & Interoperable) - AI-driven learning pathways, real-time data analytics, automated funding, and compliance monitoring.

6.3. RALEXILA MODEL

6.3.1 Key relationships between ALE and ILA components

A well-functioning ALE/ILA system requires the integration of multiple components that must work together to provide a seamless experience for learners, providers, and funders.

At the core of this system are the following elements.

- **The National ALE Registry** – A centralised course and provider database that ensures verified learning opportunities, accreditation, and quality assurance.
- **The ILA Mechanism** – A system that allows individuals to track, manage, and spend learning entitlements.
- **Funding & Payment Systems** – A structured framework for allocating, verifying, and disbursing funds from public authorities, employers, or other funders.
- **Interoperability & Standards** – Ensuring that national systems align with European frameworks (Europass, ESCO, ELM) for improved recognition.
- **User-Centric Digital Infrastructure** – A platform that provides intuitive access, guidance tools, and real-time learning insights for users.

To ensure that these components interact effectively, integration efforts should be planned efficiently, ensuring that ALE and ILA systems are developed in a cohesive and interoperable manner.

- If a country already has an ALE registry, what additional data structures are needed to integrate ILA funding and learner accounts?
- What mechanisms are required for secure data exchange between funding bodies, providers, and national authorities?
- How can a single sign-on system (SSO) or digital identity framework help unify access to ALE and ILA services?

6.3.2 ALE and ILA Capability Map

The ALE/ILA Capability Map provides a representation of the key functional areas that make up an effective ALE registries and ILA platform.

Each capability within the map corresponds to a specific function or feature that supports the design, implementation, and governance of ALE and ILA systems.

These capabilities are categorised based on their role within the system and are further prioritised according to their perceived importance in the implementation process.

Each country should adapt the prioritisation based on its own policy goals, funding availability, digital infrastructure, and system maturity.

The capability map serves as a practical tool to help policymakers, system designers, and stakeholders assess their current ALE/ILA landscape, identify gaps, and prioritise development efforts. It provides a structured framework to guide implementation, ensuring that countries can progress step by step while maintaining flexibility to align with their unique governance models, regulatory environments, and user needs.

Foundational Capabilities
Discovery, Provider Management, User account and ILA Essential features

Advanced Capabilities
System insights and analytics, Career support, AI features

Operational Capabilities
User engagement and communication, Provider QA and compliance, ILA management and analytics, System governance, Skills, and credentials management

A detailed description of each capability can be found in the RALExILA System Model.

6.3.3 Data governance in the ALE/ILA system

Finally, a well-structured data governance framework is essential for the success of an ALE/ILA system.

Without clear policies on data collection, storage, interoperability, and security, system fragmentation and inefficiencies can undermine the platform's effectiveness.

To ensure a cohesive and well-regulated system, national authorities should establish a clear data governance structure that defines:

- What data is collected (content and structure).
- How data is stored and maintained (security, access, and quality control).
- Who owns, accesses, and updates the data (roles and responsibilities).
- How data is shared across systems (interoperability and integration).

The RALExILA model proposes a data governance approach organised in some practical steps for data collection, management, and governance based on international best practices, including the FAIR Principles (Findable, Accessible, Interoperable, Reusable)[4], ISO standards for data quality, and the Data Management Body of Knowledge (DMBOK) framework.

Step 1: Data Collection: Defining and Standardising ALE/ILA Data
The first step in system development is defining the data elements to be collected, ensuring consistency, usability, and integration with national and international frameworks. The RALExILA System Model provides a structured Data Model that categorises data elements into three broad groups: Adult Learning and Education (ALE) Registry Data Model; Individual Learning Account (ILA) Data Model; and Complementary Data for an Integrated ALE/ILA System.

Step 2: Data Storage & Security: Safeguarding System Integrity
Once data is collected, it must be securely stored and efficiently managed. A centralised or federated database model can be used depending on governance preferences.

Step 3: Data Interoperability & Integration: Ensuring Seamless Data Exchange
While countries tend to prioritise existing data structures over interoperability, a truly sustainable, scalable, and internationally compatible ALE/ILA system must be designed with interoperability at its core. Beyond technical integration, interoperability also plays a crucial role in ensuring a collective understanding of data, facilitating seamless collaboration not only between systems but also among stakeholders.

[4]FAIR Principles (Findable, Accessible, Interoperable, Reusable): Available at https://www.go-fair.org/fair-principles/

7. RALExILA Co-design Playbook

In the last chapters, the RALExILA Handbook provides detailed guidelines to co-design ALE registries and ILA platforms, as per the approach and protocols developed and implemented within the RALExILA initiative.

The playbook section help to re-run the whole co-design process, with guidelines and materials for the implementation of the multi-stakeholders' approach (stakeholders' identification and mapping, relationships, and roles, defining and implementing onboarding and engagement strategies) and of the co-design approach, based on Designing Thinking methods.

Presentations and templates for all the workshops and phases are available as well.

7.1. FROM DISCOVER TO DEFINE

The objective of this first phase is to identify gaps in the integration of comprehensive systems and training databases that support adult learning and education and to develop an in-depth understanding of the current state of play.

In this phase, the focus of the investigation is at both theoretical and policy levels, related to Individual Learning Accounts implementation, with a focus on governance frameworks, quality assurance methods, and data/information models.

Specific Objectives

- To gather and analyse up-to-date experience from national, local and organisation level initiatives, including pivotal updates on these initiatives and responses from stakeholders,
- To analyse systems that exists on national or regional level, including structure and functionality of databases related to ALE and ILA,
- To analyse governance frameworks and quality assurance mechanisms in place,
- To assess the needs and contexts for deploying ALE registries that can support the implementation of Individual Learning Accounts.

7.2. IDEATE AND PROTOTYPE

The objective of this first phase is to co-design a full system model for both the ALE registries and the ILA platform, including user stories, capability and specific data models to make those functionalities work.

For this second phase, the RALExILA approach proposes four co-design workshops.

Step 1
Collaboratively define the main system requirements and information model for National Registries of Adult Learning and Education (ALE), ensuring interoperability with European systems and integration with Individual Learning Accounts (ILAs) where applicable.

Step 2
Collaboratively refine and expand the requirements identified in step 1 (internal validation step) and tackle the additional topics emerged and not yet included in the design process.

The specific objectives of this step are for example to refine the user stories and to identify and tackle key challenges for transversal aspects (such as system competitiveness, career links, learning outcomes representation etc.)

Step 3
Validate use cases, reviewing and confirming the applicability of core use cases to meet interoperability, user satisfaction, and data security requirements and refining the identified system functionalities and improve system functionalities related to user engagement, accessibility, privacy, and quality assurance.

Additional aspects that can be tackled at this stage are, for example, the definition of data requirements and quality assurance indicators for ALE registries and enhancing cross-border interoperability.

Step 4
The final step of this phase serves as moment of transition from the modelling process to the following piloting and implementation phase and to validate the core aspects of the system model with experts.

7.3. EVALUATE AND REFINE

This phase corresponds to the last step of the co-design process, with the main aim to support local adaptation and refinement of the model, testing and validation of the registry prototype, and evaluation and refinement of the overall model as developed in the previous phase.

For this phase, the RALExILA approach recommends three main steps.

Step 1
Present and discuss the national version of the ALE registry prototype, to review key components such as the governance model and system structure, offering feedback based on national realities. The goal is to assess how well the prototype aligns with national needs and priorities.

Step 2
Address technical and operational aspects of the registry, such as the user stories, system functionalities, and possible implementation scenarios, to identify strengths, gaps, and areas for improvement.

Step 3
Refine the registry model using insights gathered in the previous sessions, to also address any remaining issues and collects final suggestions, to strengthen the model's readiness for national implementation.

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