chaise

blockchain skills for Europe

D9.5.2:

European Blockchain Skill Cooperation Network Institutional and Management Plan

October 2024

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DISCLAIMER

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CHAISE Consortium			
Partner Number	**Participant organisation name**	**Short name**	**Country**
1	Université Claude Bernard Lyon 1	UCBL	FR
2	International Association for Trusted Blockchain Applications	INATBA	BE
3	Fujitsu Technology Solutions NV	FUJITSU	BE
4	Ministry of Education and Religious Affairs	YPEPTH	GR
5	ECQA GmbH	ECQA	AT
6	DIGITALEUROPE AISBL	DIGITALEUROPE	BE
7	IOTA Stiftung	IOTA	DE
8	Universitat Politècnica de Catalunya	UPC	ES
9	Duale Hochschule Baden-Württemberg	DHBW	DE
10	Associazione CIMEA	CIMEA	IT
11	INTRASOFT International S.A.	INTRASOFT	LU
12	Institute of the Republic of Slovenia for Vocational Education and Training	CPI	SI
13	European DIGITAL SME Alliance	DIGITAL SME	BE
14	University of Tartu	UT	EE
15	Univerza V Ljubljani	UL	SI
16	BerChain e.V.	BERCHAIN	DE
17	Italia4Blockchain	ITALIA4BLOCKCHAIN	IT
18	Autoritatea Naţională pentru Calificări	ANC	RO
19	Akkreditierungs ,Certifizierungs- und Qualitätssicherungs- Institut e.V.	ACQUIN	DE
20	EXELIA	EXELIA	GR
21	INDUSTRIA Technology Ltd	INDUSTRIA	BG
22	Crypto4all	C4A	FR
23	Economic and Social Research Institute	ESRI	IE

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Abbreviations

D	Deliverable
DAO	Decentralised Autonomous Organisation
DLT	Distributed Ledger Technology
E&T	Education & Training
EBSCN	European Blockchain Skill Cooperation Network
EQF	European Qualification Framework
EU	European Union
ICT	Information and Communications Technology
KPI	Key Performance Indicator
LSP	Large-Scale Partnership
MOOC	Massive Open Online Course
NBSP	National Blockchain Skill Partnership
OER	Open Educational Resources
PT	Points
SC	Steering Committee
SME	Small and Medium-sized Enterprise
SSA	Sector Skill Alliance
VET	Vocational Education and Training

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1 European Blockchain Skills Cooperation Network Overview

1.1 Background

The European Blockchain Skill Cooperation Network (EBSCN) is structured to succeed the CHAISE Sector Skills Alliance (SSA), aiming to establish a permanent alliance among sectoral stakeholders dedicated to evaluating and addressing blockchain skill needs across Europe. Building upon the foundations laid by the CHAISE project, initiated by the ERASMUS+ program of the European Union (Grant Agreement No 621646-EPP-1-2020-1-FR-EPPKA2-SSA-B) and launched in November 2020, CHAISE SSA has developed strategic blockchain skills training solutions for both current and future workforce needs.

Recognising blockchain as central to the EU's digital transformation strategy, CHAISE has positioned the European blockchain sector for global leadership. However, this potential relies on cultivating a competent and versatile workforce. Key challenges include talent shortages, global competition, and limited connections between education and the market. CHAISE has aimed to establish an open, inclusive blockchain skills governance system to address skills mismatches and deliver tailored training, intelligence gathering, and mobility solutions.

At the core of EBSCN is a commitment to continuing the work of CHAISE SSA, fostering robust collaboration among diverse stakeholders, including public authorities, sectoral and social partners, businesses, education and training providers, regulatory bodies, and individuals. By establishing a collaborative framework, the network aims to facilitate ongoing dialogue and cooperation, ensuring that skill development initiatives are relevant and impactful. To address blockchain skills shortages and future needs, the network will utilise and continuously update the core educational resources of CHAISE SSA.

The suggested governance structure of EBSCN ensures sustainability and practicality. It includes a Steering Committee with representatives from key stakeholder groups (including some of the original CHAISE SSA partners) providing strategic direction and oversight. Specialised Working Groups will focus on skills intelligence, curriculum development, and stakeholder engagement, while National Coordinators will ensure local relevance and impact. An Advisory Board of blockchain technology and education experts will offer insights on emerging trends and technologies.

The anticipated outcomes of this comprehensive plan include a stronger, more skilled blockchain workforce in Europe, enhanced brand awareness and leadership in blockchain skills, and ongoing collaboration among stakeholders. The network will continuously update educational resources and training programs to reflect the latest industry developments, maintaining a dynamic mechanism for updating job vacancies and education offers. This overview sets the stage for EBSCN's goals and structured approach, paving the way for Europe to lead in blockchain expertise and innovation.

1.2 Mission

The mission of the new network is to address blockchain skills shortages and future needs by fostering robust collaboration among diverse stakeholders, with focus on traineeships and scholarships programs, ensuring that skill development initiatives are relevant and impactful.

1.3 Vision

The vision is to cultivate a competent and versatile workforce that positions Europe as a global leader in blockchain technology, thereby enhancing brand awareness and leadership in blockchain skills.

1.4 The CHAISE Resources

The CHAISE Library of Resources acts as a centralised resource hub with a variety of outputs designed to meet the evolving needs of the blockchain sector, including:

1.4.1 Study on the Labour Market & Skills Needs in the Blockchain Sector

- Definition of blockchain workforce characteristics

- Identification of the emerging blockchain occupational profiles in the EU labour market (BC manager, architect and developer)

- Definition of skills requirements and training priorities per occupational profile

1.4.2 Blockchain Skills Forecasting Model

- Collaborative method for the anticipation of future skill demand and supply

- Consistent, reliable predictions of blockchain demand & supply

- Early warning information system to mitigate possible labour market imbalances.

- Supporting E&T and labour market actors in making evidence-based decisions

1.4.3   An Industry-Validated European Blockchain Skills Strategy

- 5 strategic objectives

- 19 action areas

- 10-year implementation period

- 79 initiatives documented and analysed

- Endorsed by 53 stakeholders

1.4.4   Blueprint of a VET qualification on Blockchain and DLT

- It provides a roadmap for qualification and accreditation bodies, qualifications experts, VET providers, VET trainers, and curricula designers in ICT to implement CHAISE-identified occupational profiles (Blockchain Developer, Blockchain Architect, and Blockchain Manager).

- The report aims to contribute to the harmonisation of occupational requirements and recognition of skills for Blockchain specialists at the European Union level.

1.4.5   Massive Open Online Course (MOOC) on Blockchain Skills & Online Certification

- For learners: https://chaise-blockchainskills.eu/online-course-learners/

- For trainers: https://chaise-blockchainskills.eu/training-materials/

- EQF 5 | 120 ECVET credits

- 5-semester duration

- 12 modules | 48 lectures

- 1200 hours of theoretical learning | 900 hours of practical learning

- 3 learning pathways

- More than 1000 individuals enrolled so far

- Establishment of the CHAISE certification scheme: CHAISE examination portal fully deployed (3 types of certificates for each occupational profile and certificates stamped by INATBA)

1.4.6 Blockchain Career Guidance & Alumni Platform

- Deployment of an EU-wide virtual 'blockchain' career guidance and alumni platform

The primary goal of the CHAISE Library of resources is to bolster European leadership in global blockchain skills development while ensuring that this growth reflects European values and needs.

Designed as a user-friendly one-stop platform, the library provides stakeholders with streamlined access to essential information on blockchain skills development. It is critical that the EBSCN maintains regular updates to these resources, which are vital for sustaining Europe's strategic autonomy and aligning international blockchain education with European regulations and values.

1.5 The CHAISE Consortium & Associated Partners

The CHAISE consortium consisted of 23 core partners with extensive experience in blockchain and/or education and learning. CHAISE Associated Partners have supported the objectives of CHAISE SSA. As an Associated Partner, organisations could engage in various project work streams, facilitating long-term cooperation and alignment with CHAISE's mission to bridge the digital skills gap in the blockchain industry. This partnership allowed entities from diverse sectors – public and private organisations, learning providers, accreditation bodies, and social partners – to access up-to-date resources, industry insights, and educational opportunities, ensuring they stay at the forefront of blockchain advancements while fostering a comprehensive and inclusive training ecosystem across Europe. Now the Associated Partners can continue their support and collaboration through EBSCN, extending their engagement and impact in this evolving field.

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1.6 National Blockchain Skills Partnerships (NBSPs)

NBSPs are a key initiative designed to promote skill development and blockchain proliferation strategies in alignment with the European Blockchain Skills Strategy. With the establishment of 13 NBSPs, this initiative aims to ensure the long-term sustainability of sectoral cooperation and support the rollout of national sectoral skills strategies by engaging all relevant EU and national stakeholders.

Key objectives of the NBSPs include:

- **Enhancing EBSCN Work Nationally**: Complement and enhance the efforts of EBSCN by implementing its strategies at the national level, ensuring a cohesive and comprehensive approach to blockchain skills development across Europe.

- **Permanent National Partnerships**: Establish lasting national blockchain skills partnerships.

- **Strategic Endorsement and Support**: Gain endorsement and support from trade unions, sectoral and professional associations, and educational authorities at the national level to ensure comprehensive backing and legitimacy.

- **Implementation of Skills Strategies**: Tasked with implementing skills strategies and action plans in each country, the NBSPs will facilitate the rollout of CHAISE results at national and regional levels.

- **Wide Adoption and Impact**: Ensure the broad adoption of project results, systematise the sectoral skills strategy, intelligence tools, and training solutions, and achieve a lasting impact that extends beyond partnership countries, benefiting the entire European blockchain sector.

By focusing on these goals, the NBSPs will play a vital role in exploiting project results at the national level, ensuring that the advancements in blockchain skills development are effectively disseminated and adopted throughout Europe. This initiative is crucial for maintaining Europe's competitive edge in the global blockchain landscape and fostering innovation and expertise across the continent.

2 Stakeholders and Ecosystem Analysis

The CHAISE project targets a diverse range of stakeholders to ensure a systemic and sectoral impact beyond its duration. These stakeholders can be categorised into several key groups:

Sectoral and Social Partners	Public Authorities	Businesses	Education & Training (E&T) Providers	Individuals
Organisations Representing Industry and SMEs These include EU or national organisations that represent industry sectors and small and medium-sized enterprises. Their involvement ensures that the skills development initiatives align with the specific needs of various industries.	**Educational and Employment Authorities** Regional or national authorities responsible for education, training, and employment are crucial for integrating blockchain skills into formal education and training systems.	**Public and Private Enterprises** Businesses active in the blockchain sector or those with dedicated training departments are essential for providing practical training opportunities and apprenticeships.	**Educational and Training Institutions** Public and private providers, including universities and training centres, are responsible for delivering the blockchain training programs.	**Impactful Individuals and Influencers** Blockchain experts, journalists, and other influencers can help raise awareness and promote the importance of blockchain skills.
Chambers of Commerce, Industry, and Labor These intermediary bodies facilitate connections between businesses, labour markets, and training providers, ensuring a comprehensive approach to blockchain skills development.	**Accreditation and Certification Bodies** These organisations ensure that the training programs meet quality standards and are recognized across the EU.	**Enterprises Offering Apprenticeships and Training** These businesses help bridge the gap between theoretical knowledge and practical application, ensuring that learners gain hands-on experience in the blockchain field.	**Networks of Education Providers** These networks facilitate the sharing of best practices and resources among education providers across the EU.	**Learners** Students and individuals seeking to enter or advance in the blockchain sector are the primary beneficiaries of the training programs.
Sector Skills Councils These councils play a crucial role in identifying skills gaps and developing	**Policymakers and Economic Development Agencies** These bodies help align the blockchain		**Organisations Representing E&T Providers** European or national organisations represent the	**Workers** Employees, freelancers, and job seekers benefit from the upskilling and reskilling

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sector-specific training programs.	skills strategy with broader economic and development policies.		interests of education and training providers, ensuring that their needs and perspectives are considered in the blockchain skills strategy.	opportunities provided by the CHAISE project, enhancing their employability in the blockchain sector.
	Career Guidance and Employment Services Organisations providing career guidance and employment services are vital for connecting trained individuals with job opportunities.			

Table 1 – Stakeholders map.

Co-funded by the Erasmus+ Programme of the European Union

3 Value Proposition of EBSCN

3.1 Unique Selling Points

The EBSCN with the CHAISE resources are designed to be the key players and tools within the European blockchain ecosystem. Their benefits can be understood through key pillars that aim to improve skills related to blockchain technology:

- **One-Stop Online Platform for blockchain knowledge and career development**: EBSCN will act as a comprehensive online hub offering resources for job seekers, employers, learners, teachers, and blockchain skill developers, making it easy to find relevant information and opportunities.
- **MOOC as the Blockchain Knowledge Centre**: An accessible Massive Open Online Course that provides foundational knowledge about blockchain and skills development, designed to enhance understanding and foster innovation.
- **Coordination Body**: EBSCN will facilitate networking and collaboration among the diverse stakeholders through regular meetings and information sharing, creating a cohesive community focused on blockchain development.
- **Visibility and Recognition for Blockchain Experts**: The network will enhance recognition of European blockchain skills professionals, promoting their expertise and contributions on a global stage, encouraging engagement in the blockchain sector.
- **Reference for Professional Involvement**: The network will serve as a benchmark for encouraging participation from individuals, organisations, and educational institutions.

3.2 Benefits for Stakeholders

While the strategic goals outlined in the previous section can provide an undeniable source of knowledge and inputs for EU decision-makers on activities regarding blockchain skills development, it is important to highlight the benefits to different stakeholders that would compel them to engage with the network:

Enhanced Brand Visibility and Strategic Leadership in Blockchain Initiatives	The network will enhance partner visibility by fostering strategic collaboration with leading organisations and providing prominent recognition on the CHAISE/EBSCN website. Additionally, it will enable partners to take a leading role in pioneering blockchain projects, offering opportunities to contribute to initiatives that shape the future of DLTs and their applications.

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Formation of Strategic Partnerships and Engagement in Blockchain Working Groups	The network will facilitate the creation of specialised working groups focused on blockchain education and skills development. These groups will drive innovation, influence key industry advancements, facilitate discussion around technology convergence, progress on national traineeship/scholarship programs, and engage in initiatives aimed at refining and updating the skills required for the blockchain industry.
Access to Exclusive Resources and Cutting-Edge Knowledge	Members will have access to valuable blockchain resources and data produced by EBSCN, supporting strategic decision-making and enhancing blockchain training programs. The network will support updates of the CHAISE MOOC by incorporating new case studies and developing courses on emerging (converging) technologies. This will ensure that educational content remains relevant and up-to-date. Furthermore, it will provide early access to advanced blockchain knowledge and insights to promote professional development.
Influence on Blockchain Education and Skills Development	The network will contribute to the update of the European Blockchain Skills Strategy, helping to establish standards for blockchain education and training. By promoting and integrating blockchain VET offerings, the network ensures that skills align with current and future workforce.
Networking and Community Engagement Opportunities	The network will organise (virtual) events to facilitate networking among industry leaders, academic experts, and public sector representatives. These events will offer opportunities for exchanging insights and building collaborative relationships. Moreover, the network will facilitate engagement with a community dedicated to education and digital skills development that contribute to a shared vision for the future of blockchain.

Table 2 – Benefits for stakeholders.

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4 Strategic Goals of EBSCN

4.1 Long-Term Goals & Matrix for Success

The strategic goals of EBSCN are as follows:

Strategic Goal	Key Performance Indicator (KPI)	Data Collection Method	Frequency of Review	Target
Permanent Sectoral Skills Cooperation Establish a sustainable blockchain skills network that maintains continuous collaboration among stakeholders.	Number of new network partners annually	Partnership agreements (logos shared on the website)	Annually	20 new partners per year
	Number of stakeholder engagement events	Event attendance records	Annually	3 events per year
Endorsement and Support Gain endorsement from prominent EU sectoral bodies such as the European Blockchain Partnership, EBSI, Europeum, DG DIGIT, INATBA, and the Digital Skills and Job Coalition.	Number of endorsements from EU sectoral bodies	Endorsement letters/records	Annually	Multiple endorsements from key bodies
Wide Adoption of Project Results Ensure broad adoption and implementation of the project's outcomes, systematising the sectoral skills strategy, intelligence tools, and training solutions developed through CHAISE.	Increase in MOOC participation	MOOC enrolment data	Bi-Annual	20% increase annually
	Number of certifications issued	Certification logs	Quarterly	120 certifications per year
	Number of collaborations with blockchain companies and institutions	Partnership agreements	Annually	3 collaborations per year
Enhanced European Leadership in Blockchain Technology Position Europe as a global leader by cultivating a skilled and versatile workforce and addressing talent shortages.	Number of blockchain professionals trained	Training program records	Bi-Annual	20% increase annually
	Number of innovation research initiatives supported	Research proposal submissions	Annually	5 initiatives over 5 years
	Global ranking position for blockchain education and research	Global ranking reports	Annually	Top 5 position within 5 years

	Number of international conferences hosted	Event planning records	Every 2 years	At least 1 major conference
Improvement of Blockchain Skills Intelligence Enhance skills intelligence by documenting skills mismatches and refining curricula.	Annual reports on skills mismatches	Surveys and industry reports	Annually	1 report published each year
	Number of curriculum revisions based on skills intelligence	Feedback sessions	Annually	1 revision per year
	Number of VET programs integrating blockchain education	Partnership agreements	Within 3 years	15 VET programs
Facilitation of Recognition, Mobility, and Industrial Connections Define EU-wide occupational requirements, link educational curricula with European recognition tools, and connect jobseekers with blockchain companies.	Frequency of updates to EU-wide occupational requirements	Documentation records	Every 3 years	Updated at least once
	Number of recognition tools linked with the CHAISE MOOC	Partnership agreements	End of 3rd year	At least 5 tools
	Number of job placements facilitated	Placement records	Quarterly	100 placements annually
	Number of mobility programs initiated	Program tracking logs	Annual	At least 3 programs per year

Table 3 – Long-term goals and KPIs.

4.2 Key Activities

EBSCN aims to continue and undertake the following activities based on the funds and resources available to the network:

Key Activity	Description	Target Stakeholders	Communication Methods	Outreach Activities
Networking, Outreach, Engagement Events and Competitions	Engage stakeholders through outreach campaigns and host conferences, webinars, and workshops to showcase achievements and gather insights. Participate in competitions like World Skills	All stakeholders	Targeted newsletters, personalised emails, social media updates and promotions, online announcements	Stakeholder engagement events, hackathons or competitions, community forums

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	Europe to demonstrate DLT-related skills.			
Feedback Collection and Continuous Improvement	Implement engaging feedback mechanisms to ensure that stakeholder insights are used to continuously refine and enhance educational offerings.	All stakeholders	Surveys, focus groups, one-on-one interviews	Feedback sessions, interactive webinars, suggestion boxes
National Blockchain Skills Partnerships Development	Promote and strengthen NBSPs to implement the sectoral skills strategy and national action plans effectively, including supporting private sector-academia-public sector partnerships.	Public Authorities, Businesses, E&T Providers	Policy briefs, targeted communications	Roundtable discussions, national workshops, consultation events
Dissemination and Communication	Utilise online dissemination infrastructures to provide regular updates on EBSCN activities and issue e-newsletters to inform stakeholders.	All stakeholders	E-newsletters, website updates, social media announcements	National action plan promotion, informational webinars
Implementation of the European Blockchain Skills Strategy	Continue implementing the sectoral skills strategy and facilitate the rollout of CHAISE results at national and regional levels.	National Blockchain Skills Partnerships, E&T Providers	Official reports, newsletters, presentations	Workshops, strategic planning sessions
Helpdesk & Open Educational Resources and Opportunities	Appoint a contact person/group of people to provide guidance on CHAISE outcomes and resources, and leverage the open educational resources through the MOOC to reach target groups, especially those hesitant to participate in formal settings.	All stakeholders	Direct communication via email, phone calls, online platforms, educational webinars	Helpdesk support during events, informational sessions, community workshops, outreach to local educational institutions
Training and Upskilling Initiatives	Organise workshops, training sessions, and AMAs/Q&As to present the benefits of CHAISE resources and enhance skills in blockchain.	E&T Providers, Individuals	Interactive sessions, Q&As, AMAs	Skill enhancement workshops, industry collaboration events
Operation of Alumni Network and Career Development Platform	Further develop alumni network initiatives to assist with job placement and scholarships for trainees.	Individuals, E&T Providers	Newsletters, online platforms	Career fairs, alumni networking events

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Gamification Activities	Incorporate gamification features into the MOOC and other resources to increase engagement, including point systems, leaderboards, and challenges.	Individuals, E&T Providers	App notifications, social media updates	Interactive demos, user engagement surveys
Utilisation of CHAISE Online Dissemination Infrastructures	Regularly update the CHAISE project's online dissemination infrastructures (website, social media) to share results and activities.	All stakeholders	Website updates, social media announcements	Information sharing during events and outreach campaigns

Table 4 – Key activities.

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5 Governance & Financial Sustainability

5.1 Governance Framework

As EBSCN transitions from grant-based funding to a sustainable operational model, it is critical to establish robust governance principles. A formalised Steering Committee will be established, formed by some of the original CHAISE partners and potentially new members willing to dedicate resources to ensure continual progress of the project and the network and actively help searching for external sources of funding. This committee will operate under a Memorandum of Understanding (MoU) to facilitate collaborative governance, benefiting from diverse insights and expertise to enhance the decision-making process.

To pioneer advanced governance models within the blockchain sector, EBSCN may adopt a (hybrid) Decentralised Autonomous Organisation (DAO) structure. This innovative approach will ensure community participation, allowing members to vote on key issues while retaining essential governance control. The decision on the final format of the network will be decided by the Steering Committee. Below is a suggested organisational structure for the EBSCN:
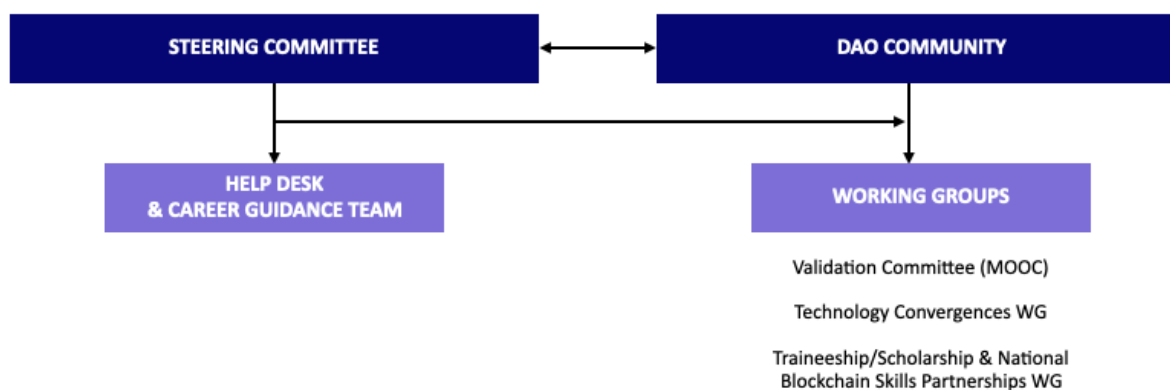

Figure 1 – Organisational structure of EBSCN.

CHAISE has fostered a robust community of associate partners, experts, and engaged stakeholders. To ensure the sustainability of this community, the Consortium has identified two key initiatives that can be leveraged to maximise the network's impact: the Digital Skills Alliance and the Digital Large-Scale Partnership (Digital-LSP) under the Pact for Skills.

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For each initiative, the Consortium has outlined strengths and weaknesses, which the Steering Committee will consider when deciding whether to merge with broader digital skills initiatives. An overview of the strengths and weaknesses of both initiatives is provided in the tables below:

DIGITAL SKILLS ALLIANCE	
STRENGTHS	**WEAKNESSES**
New community focusing on technological skills and advancements in a specific technology and their convergences (AI, Blockchain, etc).	The community is not yet as well established at the moment, this creates uncertainty about its operations and currently lacks pre-existing members.
New community that can rely on the outreach potential of DIGITALEUROPE and its membership to effectively grow and engage its members.	This initiative can be viewed negatively by the European Commission as potentially duplicating existing efforts provided by the Commission, potentially risking fragmenting the skills community and diluting the resources necessary for effective collaboration.
It maximises the prospects for sustainability since it entails a larger scale of activities, a broader network, and lock-in effects.	
It leverages potential operational synergies between projects.	
With a large network of stakeholders and broad expertise across digital skills, it can become a hub for advancing digital skills.	

Table 5 – Digital Skills Alliance strengths and weaknesses.

DIGITAL LARGE-SCALE PARTNERSHIP UNDER THE PACT FOR SKILLS	
STRENGTHS	**WEAKNESSES**
The European Commission aims to establish large-scale partnerships under the Pact for Skills that are grounded in the Blueprint for sectoral cooperation on skills. As outlined in the Erasmus+ guide 2024, *"the large-scale Pact for Skills partnerships in ecosystems will build on the Blueprint for sectoral cooperation on skills",* so these partnerships will leverage the Blueprints to enhance cooperation across various ecosystems. Partners in the LSP are developing a joint strategy to design and implement an ecosystem-wide upskilling and reskilling	Despite initial efforts to systematise the Blueprint projects under the Pact for Skills, the workplan for blueprint project activities within the Digital LSP has yet to be finalised and is expected to be released in 2025.

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framework, which will support Europe's green and digital transitions across all industrial ecosystems. The LSP is already in contact with all Blueprint projects within the digital ecosystem, as well as several Centers of Vocational Excellence and alliances.	
The LSP and Pact for Skills will maximise synergies among projects with special attention to Blueprints; the initial efforts of the Pack for Skills initiative aimed at systematising all projects within various ecosystems can be found here.	At present, there are no established technology forums within the LSP to discuss trends and skills development. However, the workplan entails the development of such forums, to create spaces where the Blueprint projects' communities can engage and collaborate with the existing LSP community.
Participation in the Pact for Skills and the LSP is not just crucial for accessing EU funding, but it is a fundamental eligibility condition for engaging in blueprint projects. Without the involvement of Pact for Skills and LSP members, project continuation is not feasible, highlighting their essential role in ensuring sustainability.	
The self-sustaining governance of the community ensures that no additional financial or time resources are required from partners to move forward. This approach enhances resource efficiency while maintaining effective collaboration and coordination.	

Table 6 – Digital Large-Scale Partnership under the Pact for Skills strengths and weaknesses.

5.2 Financial Sustainability

Ensuring the sustainability of CHAISE post-grant through EBSCN is critical to its long-term success and relevance. Financial strategies should focus on finding new sources of funding through public sector calls for projects (e.g. Erasmus+), private sponsorships and partnerships. Initially, for the transition period, the EBSCN Steering Committee partners might need to dedicate their own resources to ensure the progress of the initiative.

Furthermore, the network might consider membership fees for future partners. However, this can be done only in case the fees are structured to complement, rather than compete with, the membership-target profiles and models of the CHAISE partners' own structures.

Leveraging Additional Financial Resources

To further enhance the network's financial sustainability, several strategies can be explored:

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Membership fees	Charge a fee to partners for access to resources, networking opportunities, and participation in governance.
Certification and examination fees	Charge fees for the CHAISE MOOC certification (examination) and offer paid courses and credits for professionals needing to maintain their certification.
Grants and sponsorships	Apply for EU and national grants focused on digital skills and workforce development, and seek sponsorships from companies benefiting from a skilled blockchain workforce. Examples include calls similar to Centres for Vocational Excellence or Advanced Digital Skills
Premium educational content and resources	Offer advanced courses, workshops, and seminars for a fee. Subscription model could also work well with such premium content.
Consulting and advisory services	Provide customised reports and consulting services to businesses and governments on blockchain skill needs and trends, and offer services to educational institutions and businesses to develop tailored blockchain training programs.
Events and conferences	Host paid workshops, webinars, trainings, and co-organise an annual conference with registration fees, sponsorships, and exhibition booths.
Partnerships and collaborations	Form partnerships with blockchain companies for co-branded educational initiatives, and collaborate with universities and research institutions for funded research projects and training programs.
Gamification	The MOOC platform can provide tiered access for premium learners who want to get additional (premium) levels of knowledge. Eventually the platform could deploy token rewards for those learners who are completing each modules or reaching certain skill levels. These tokens could be monetised or traded for the certification, premium content, or blockchain-based rewards, such as NFTs. Users could be also incentivised through a referral system where they would get points or rewards for referrals to other users.

Table 7 – Potential financial resources.

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6 Platforms and CHAISE Resources Updates

This chapter outlines the strategic plans for maintaining and upgrading the network's resources. A key focus is on ensuring that the network remains at the cutting edge of technology, incorporating modern tools and practices that enhance user experience and operational efficiency.

6.1 MOOC Platform

The Massive Open Online Course should be updated on a bi-annual basis by the Validation Committee. Composition and continuation of the Validation Committee activities shall be ensured by the Steering Committee.

6.2 CHAISE Website and Social Media Accounts

The CHAISE website and social media channels shall be managed and updated by a dedicated member of the Steering Committee. These platforms will provide regular updates on EBSCN activities and serve as a vital communication tool for engaging stakeholders, sharing resources, and promoting events.

6.3 Certification

The Steering Committee will ensure that the MOOC course is provided for free. Certification/examination will incur costs, hence a fee will be charged, ensuring the examination and certification continues to be provided. The Steering Committee will actively work on finding ways to ensure free certification for students.

6.4 EBSCN Online Presence

The Steering Committee will discuss the best approach toward creating the online presence for EBSCN, ensuring the continuation of the CHAISE activities as well as the unique brand of the new network.

6.5 Career guidance and alumni platform

The career guidance and alumni platform shall be managed and updated by a dedicated member of the Steering Committee. This platform will serve as a one-stop resource for job seekers, employers, learners, teachers and trainers, and organisations involved in developing blockchain skills.

6.6 Updates and Enhancements to the Resources: Integrating Generative AI & Gamification Elements

The Steering Committee might consider the integration of generative AI technologies and gamification elements into the CHAISE resources.

This integration could enable sophisticated features such as metadata tagging, content summarisation, enhanced searching, and indexing capabilities. It could also facilitate more complex analyses, such as tracking changes in educational content and predicting future needs. To further enhance user engagement and learning outcomes, various gamification elements could be incorporated into the CHAISE resources, including earning points and rewards, leadership boards, interactive learning modules, and mentorships-for-reward mechanisms.

While we recognise the potential benefits of integrating these elements, we are also aware that the implementation of such features can be complex and resource-intensive. Careful planning and evaluation will be essential to ensure that these enhancements align with the overall goals of the EBSCN and meet the needs of the user community.

6.7 Platforms and Resources Upgrades

The platforms and resources supporting EBSCN will be regularly assessed and upgraded to ensure it meets the community's growing demands and stays ahead of technological advancements. Further details and specific implementation strategies will be refined by the Steering Committee.

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7 Implementation Roadmap

This chapter outlines specific actions, milestones, and strategies to ensure the successful implementation of EBSCN over a 10-year period in order for it to remain relevant, adaptive, and impactful in an ever-evolving digital world. The network's main focus will revolve around progressing the activities of NBSPs, traineeships and scholarships programs, delivering and promoting the CHAISE resources and expanding the network's impact.

7.1 Phase 1: Initial Setup and Validation (Years 1–2)

Table 8 – Phase 1: Initial Setup and Validation (Years 1–2).

7.2 Phase 2: Expansion and Upgrades (Years 3–5)

IMPLEMENTATION ACTIONS	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
Expand blockchain training programs to include advanced courses focusing on technology convergence.			■	■	■	■	■	■	■	■
Increase outreach efforts to attract new partners and stakeholders.			■	■	■	■	■	■	■	■
Launch a targeted marketing campaign for the updated MOOC.			■							
Organise workshops for knowledge exchange among stakeholders and establish strategic partnerships with leading blockchain companies.			■							
Conduct a mid-year review of stakeholder engagement and network participation metrics.			■							
Integrate generative AI technologies into training and resource platforms.				■	■					
(Co-)host an international conference to showcase EBSCN's progress, DLT innovation and skills development, featuring traineeship programs.					■		■			
Evaluate and update the MOOC based on the latest skills intelligence findings.					■					
Launch new promotional efforts highlighting successful case studies and expand NBSPs.					■	■	■	■	■	■
Conduct a comprehensive review of the EBSCN's progress and engage stakeholders to gather insights for future improvements.						■				
Prepare for the transition to Phase 3 by evaluating resource allocation and stakeholder needs.						■				

Table 9 – Phase 2: Expansion and Upgrades (Years 3–5).

7.3 Phase 3: Maturity and Leadership (Years 6–10)

IMPLEMENTATION ACTIONS	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
Establish partnerships with new industries to diversify participation and assess global trends in DLTs.						■	■	■	■	■
Introduce advanced educational technologies and methodologies into training programs.								■	■	■
Collect feedback from all stakeholders to identify areas for future improvement and perform a thorough impact assessment of EBSCN's contributions to DLT skills development.									■	
Update the long-term sustainability plan based on stakeholder insights and changing needs.									■	
Make final decisions on the future trajectory of EBSCN, develop strategic initiatives for ongoing engagement post 10 years of EBSCN.										■
Prepare a comprehensive report detailing achievements and lessons learned.										■

Table 10 – Phase 3: Maturity and Leadership (Years 6–10).

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8 Conclusion

EBSCN is set to build on the achievements of the CHAISE SSA to advance blockchain skills development across Europe. The network is designed to address the increasing demand for blockchain expertise through a comprehensive strategy focused on sustainability, innovation, convergence of technologies, and stakeholder engagement.

EBSCN's mission revolves around establishing a durable and dynamic blockchain skills network that will sustain and enhance the progress made by CHAISE. The network aims to be a central hub for blockchain skills, offering a one-stop platform, acting as a knowledge resource, and coordinating efforts among diverse stakeholders. Its strategic objectives include creating a lasting alliance among stakeholders, advancing skills development, strengthening European leadership in blockchain technology, and improving skills intelligence and industry recognition.

To ensure long-term success, EBSCN will employ a sustainable governance framework and a strategic approach to financial sustainability. Key strategies will include optimising investments among Steering Committee partners, leveraging additional financial resources through grants, sponsorships, and exploring non-competitive membership fee structures. A pioneering aspect of EBSCN's governance could be the establishment of a DAO, which would utilise blockchain technology to enhance transparency and wider stakeholder engagement. The network plans to integrate advanced technologies, such as generative AI or gamification elements, to enhance its educational resources, user experience, and overall functionality. Regular updates and technological upgrades will ensure that EBSCN remains at the forefront of innovation and continues to provide valuable services.

A structured 10-year roadmap will guide EBSCN's development. The initial phase will focus on establishing governance structures and launching a fee for the MOOC examination (while finding ways to providing free exams for students), followed by expansion of training programs and integration of advanced technologies. The later stages will emphasise strengthening global leadership, introducing continuous innovations, and assessing the network's long-term impact to ensure sustainability.

By leveraging the foundation laid by CHAISE, implementing innovative governance and financial strategies, and focusing on technological advancements and convergences, and stakeholder engagement, EBSCN will contribute significantly to Europe's digital transformation and maintain its leadership in the global blockchain arena.

9 References

We would like to acknowledge the use of ChatGPT for this plan to assess the readability and comprehensiveness of the document.

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