D3.3 – ECSA Institutional Arrangements (Governance and Functioning)

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Author(s)	Dominik Zupan, Jan Eberl
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0.9	16.07.2025	Dominik Zupan	TU Graz
0.10	16.07.2025	Alessandra Messana	CIMEA
0.10	17.07.2025	Manuela Costone	CIMEA
0.11	22.07.2025	Victoria Cummings	SEMI
0.12	28.07.2025	Irene Da Pont	SEMI
0.13	29.07.2025	Birgitte van Don	PTvT
0.14	05.08.2025	Jens Hofmann	Silicon Saxony
0.15	11.08.2025	Dominik Zupan	TU Graz

0.16	12.08.2025	Bernd Deutschmann	TU Graz
0.17	13.08.2025	Jan Eberl	TU Graz
0.18	27.08.2025	Dominik Zupan	TU Graz
0.19	11.09.2025	Olivér Krammer	BME
0.20	16.09.2025	Isabel Engel	imec
0.21	17.09.2025	Jan Eberl	TU Graz
1.0	22.09.2025	Dominik Zupan	TU Graz

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1. Introduction

The main goal of Work Package 3 (WP3) is to establish the European Chips Skills Academy (ECSA). WP3 therefore covers the skills strategy as well as the ECSA institutional arrangements, operational features and educational aspects.

This deliverable defines the overarching model of the decentralised European Chips Skills Academy, describing its governance and business model. The key part is to identify a governance structure that allows the participation of vocational education and training providers (VET), higher education institutions (HEI), industry, research and social partners. We consider the different dynamics of the actors involved and identify the common features that can bring a such diverse cohort of actors together. Therefore, a key element is to define the different institutional and organisational structures and how the different actors collaborate in a decentralised space.

Furthermore, we define operational aspects to formalise the functioning of ECSA. This includes:

1. The internal governance structure and organisation of ECSA,
2. The Business Model incl. cost structures and revenue streams and
3. The sorganisation in an association.

1.1 Vision of ECSA

The consortium jointly agreed on the following vision of ECSA:

The ECS Academy aims to be a decentralised and accessible platform connecting educational institutes, companies, and professionals in the semiconductor industry across Europe, offering online courses, job postings, networking opportunities, and recognised certifications, while fostering collaboration among stakeholders and addressing market needs through continuous updating and specialised training initiatives.

This vision clearly highlights the importance of ECSA to not only be a course platform, but to also act as a networking institution connecting all relevant stakeholders, addressing market needs and offering specialised training.

In order to fulfil this vision, we develop the governance and functioning of ECSA in this deliverable.

1.2 Document Structure

This document is organised as follows: In section 2, we describe the prerequisites given by the proposal and the project partners, i.e. prioritisation of goals, participation, activities, joining efforts, etc. Based on these prerequisites, we develop the business model in section 3.1 and derive a suitable governance structure in section 3.2. Further on, we describe future pressures and a transition model to ensure a smooth transition towards the end of the project.

This document is strongly linked with the project task "Define institutional arrangements (governance and functioning) of the ECS-Academy" (project identifier T3.2) and the deliverables "ECS-Academy Operational Features and Tools" (project identifier D3.4), "ECS-Academy Educational and Pedagogical Aspects" (project identifier D3.5) and "ECS-Academy Implementation and Validation Plan" (project identifier D3.6) of the project proposal.

1.3 Executive Summary

Purpose

This deliverablesdefines the governance structure for the European Chips Skills Alliance (Alliance) and its integration with the European Chips Skills Academy (ECSA) and European Chips Diversity Alliance (ECDA). The deliverable provides the foundation for how the Alliance as a whole will function beyond the project, ensuring sustainability and stakeholder participation.

Key Results

- **Governance Model**: Establishes a transition from project to association/network, with a General Assembly, Alliance Board, Management Director, and Working Groups.
- **Stakeholder Participation**: Includes industry (large enterprises, SMEs), HEIs, VET providers, research organisations, clusters, and soft-skill partners, recognising their different institutional structures.
- **Membership**: Tiered membership model with fees adjusted by organisation type; option for in-kind contributions.
- **Decision-Making**: Balanced between inclusivity (all members represented) and efficiency (Board decisions).
- **Sustainability**: Financing foreseen through membership fees, in-kind contributions, public-private partnerships, and future EU funding.
- **Alignment**: Governance designed to align with Pact for Skills, EU Chips Act, and broader microelectronics skills initiatives.

Next Steps

- Statutes and internal rules (Terms of Reference, Code of Conduct, Membership Agreement) in deliverable “ECS-Academy Operational Features and Tools”.
- Pilot the governance model within the project phase (Board, Working Groups).
- Prepare financial scenarios to define membership fees.
- Validate governance structure of the Alliance, refine structural choices and confirm commitments to post-project participation to create a sustainable Alliance.

2. Prerequisites and General Conditions of ECSA

When creating the governance model, we first define the general conditions that most of the ECSA partners agree on. A large consensus is necessary to ensure that ECSA is sustainable beyond the project duration. Through a series of surveys and workshops, we define the mission and goals of ECSA, its value propositions, participation models, joint models, including the European Chips Skills Alliance and the European Chips Diversity Alliance (ECDA), but also non-goals.

In the following, we mainly summarise the results from:

- a template providing best practices on educational activities in February 2024,
- a questionnaire in March 2024,
- a workshop (2-day workshop including follow-up questionnaires in between and after) in April and May 2025,
- continuous discussions during the monthly consortium and work package leader meetings.

The outcomes of these questionnaires, workshops and discussions serve as a basis for the governance and functioning of ECSA.

2.1 Mission and Goals of ECSA

We deduce the main mission, respectively, the goals of ECSA to be:

- Networking/Community Building,
- Education/Training,
- Skills Intelligence,
- Career Guidance/Job Opportunities,
- Competence Synchronisation/Micro-Credentials,
- Auditing Services.

We describe each of these goals in more detail in the value propositions of the business model in section 3.1.1. In Figure 1, we rank these goals by importance based on the answers of the partners in the workshop.

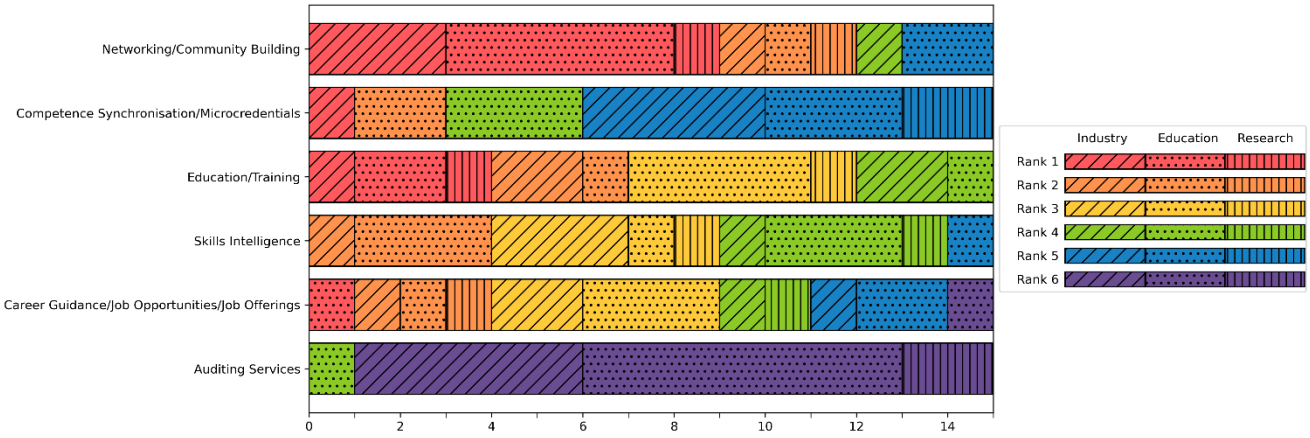

Figure 1: Ranking of Mission/Goals of ECSA, based on the type of partners (Industry, Education or Research and Soft Skill).

Network building is considered to be the most important goal of ECSA for half of the partners. This is mainly due to the following reasons:

- Many partners experience a greater, more immediate and more visible impact, when offering networking activities. These activities are less resource-intensive, while addressing a broader audience, compared to traditional trainings. Activities such as the student ambassador programme often act as a multiplier, as students disseminate the results of ECSA and career opportunities in the semiconductor field among their peers.
- The partners agree that ECSA should become a training hub instead of being mainly a training content creator. There already exist various well-made trainings on all topics of microelectronics. Developing new trainings from scratch requires many resources and brings ECSA into competition with other well-established training providers, which should not be the goal of ECSA. However, by linking internal and external trainings with knowledge, skills and competences and therefore occupations within the European Skills Competences and Occupations (ESCO) framework, ECSA can generate added value among all stakeholders. To link trainings with the ESCO framework, we use the Skills Hub[1] that was first developed by partners VSB TUO within the Automotive Skills Alliance (ASA) and is further developed within ECSA.
- Most external interest and value members perceive comes from sectoral cooperation and connections. Members are primarily seeking a community to share resources, find partners, and amplify their initiatives — not necessarily a new training provider. Networking supports long-term visibility, relevance, and brings diverse actors (industry, education, research, government) together. This increases the project's chances of evolving into a sustainable, widely adopted platform.
- Skills intelligence is seen as complementary to networking rather than a core, standalone offering. Networking amplifies the effect of skills intelligence by distributing insights and encouraging collaborations.

[1] https://skills-hub.eu/

2.2 Participation of Partners in ECSA

Based on the goals in the preceding section, we evaluate whether and in which way partners can contribute to these specific goals during and after the end of the project. We show the results in Figure 2.

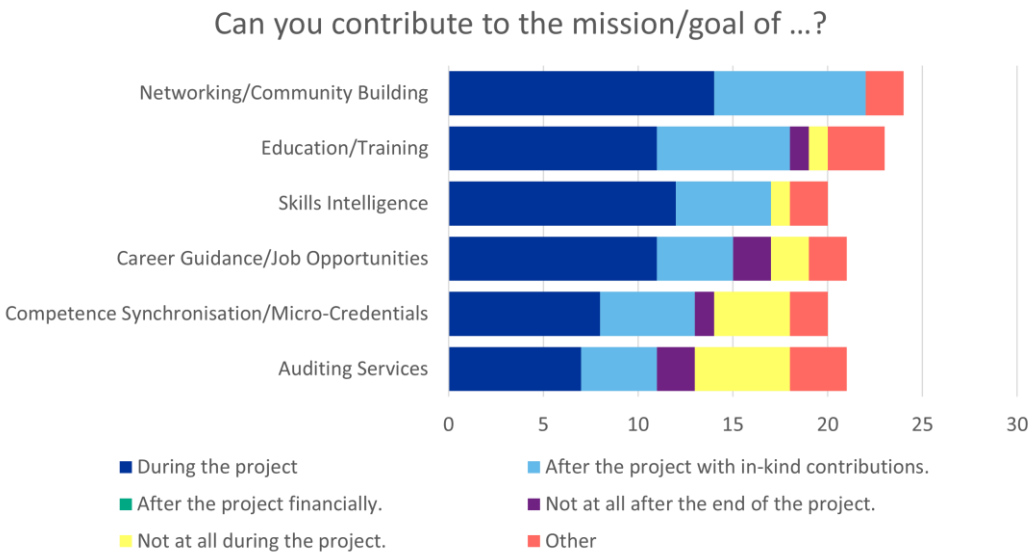

Figure 2: Contribution of partners to the goals of ECSA.

Most of the partners can contribute to the goals of network/community building, education/training development, career guidance and skills intelligence, while receiving project funding. After the project lifetime, the number of partners that can support these goals with in-kind contributions decreases by about 50%. It is also important to note that no project partner indicated that they can contribute financially after the project. When it comes to long-term sustainability, we therefore require a combination of membership fees and in-kind contributions by members. The basis for the long-term sustainability will be a fee-based membership. In exceptional cases, partners will be able to contribute to some of the goals of ECSA by in-kind contributions. However, to split the in-kind contributions in a fair way among partners, we develop a model of how much different in-kind contributions are worth, how they relate to the fees, and how partners can benefit by committing to them.

Figure 2 also shows that the goals of competence synchronisation and auditing services are of less importance and fewer partners can contribute to these goals, as many partners lack knowledge in these fields.

ECSA comprises a wide range of stakeholders, with various institutional and organisational arrangements and structural differences. This has an huge impact on the governance the long-term sustainability of ECSA. Therefore, we ensure, that every type of stakeholder can contribute best, based on their capabilities and needs:

- Large companies can provide strategic direction and long-term manpower planning. They can make major investment in training, internship, and infrastructure access. Their decision-making tends to be formalised and longer, but they offer stability and good sector alignment.

- Small and Medium Enterprises (SMEs) offer niche specialization and flexibility. They are key in pilot-testing new approaches and addressing specialized skills demands. However, due totheir limited size, we need to minimise barriers to participation (e.g. reduced fees, in-kind contributions).
- Higher Education Institutions (HEIs) provide advanced knowledge sharing, research excellence, and degree programmes (EQF 6-8). HEIs also enable academic recognition and mobility across the world through systems like ECTS. HEIs have formal and centralised structures, which ensure quality, but respond rather slowly.
- VET providers offer practice-oriented learning at EQF 3-6. Their close links with regional labour markets allow to respond fast to changing industry needs and ensure high employability on graduation. VET providers can contribute to ECSA providing a strong regional orientation and knowledge on varied national regulatory regimes.
- Research and Technology Organisations (RTOs) link basic research and industrial application. They offer insight into emerging technologies and access to leading-edge facilities. Their role in governance adds the innovation and skills-for-the-future dimension to ECSA.
- Cluster associations and organisations are multipliers by linking local surroundings and promoting interests of member groups. They ensure small operators get noticed and are able to feed into European-level debates.
- Soft-skill and social partners provide transversal competences and skills expertise (communication, teamwork, leadership). They ensure that inclusivity, diversity, and equity principles are embodied in the practices of the Academy. They further ensure that the ECSA governance fits broader expectations from society.

Detection of such structural differences is critical to the governance approach of ECSA. It allows the Alliance to balance stability and flexibility, academic excellence and receptiveness to the needs of industry, and to guarantee the role of both large and small contributors in the common aim. Therefore, we propose that the Alliance board will be comprised of all types of stakeholders (see section 3.2.1).

2.3 Participation of Partners in Governance of ECSA

Appropriately, the question also arises as to which partners would be interested in participating in the governance of ECSA. The results can be found in Figure 3. Ten of the 17 partners who voted could participate in governance. Four partners are not interested, and three other partners make this dependent on the exact definition of ECSA. From this, we conclude that the majority of partners are willing and able to play a role in the governance of ECSA.

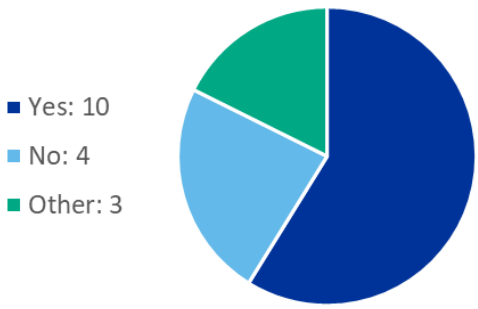

Figure 3: Participation of partners in the governance of ECSA.

2.4 Types of Associations

There are different possibilities of organising ECSA. The most important types of associations are listed below, from an informal structure to the strongest formal structure.

1. **Informal association**

   A group formed by people sharing a common identity or purpose, based on personal relationships and social networks, without formal structure, legal existence, or official leadership.

2. **Private-Public Partnership (PPP)**

   A collaboration between public bodies and private-sector companies to finance, build, and operate public projects (such as infrastructure), combining public incentives with private sector innovation and funding.

3. **Association Sans But Lucratif (ASBL)**

   A non-profit association to pursue a disinterested purpose, with its own legal personality, where members cannot receive financial benefits from the association

4. **European Economic Interest Group (EEIG)**

   A legal entity under EU law that enables companies from different countries to cooperate for common business interests; its activities must support those of its members, and profits or losses are attributed to the members directly.

In Figure 4 we show the results of whether partners could participate in any of these associations. It is clearly visible that the more formal the association would be, the less likely partners could participate. Four to five partners can participate in any of these associations without any problems. Others can only do so under certain circumstances that need to be accounted for in the governance and functioning of ECSA.

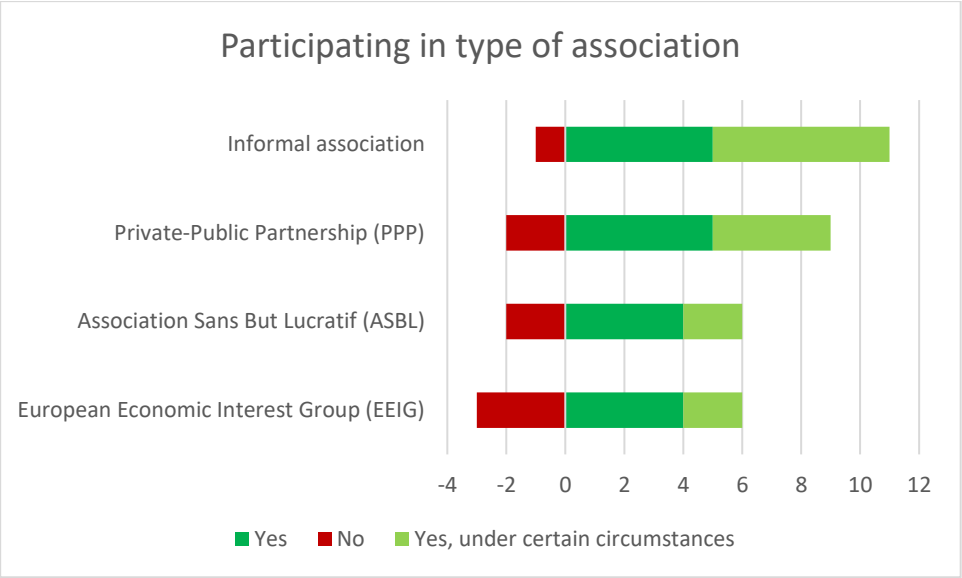

Figure 4 Participation in Association.

Additionally, there are six partners who have experience to develop any of the aforementioned formal associations. We take their valuable experience into account when defining the type of association.

2.5 Educational Activities

In this section, we summarise possible educational activities that ECSA could offer. The results mainly come from the best practice template from February 2024 and the questionnaire in March 2024. In this section, we only describe the basic requirements, whether and which activities we can offer. We explain all activities in detail in the deliverable "ECSA Educational and Pedagogical Aspects" (project identifier D3.5).

Figure 5 summarises which activities should be offered based on the opinion of all partners in blue and how likely it is, that a partner can offer one or more of these activities (green: very/somewhat likely; red/orange: very/somewhat unlikely). In short: an educational activity in ECSA should be prioritised if both bars are high. This means that most partners are of the opinion that an activity should be offered and also that some partners have the possibility to provide this activity. Therefore, we prioritise the following educational activities:

- Online courses,
- Internships,
- Micro-credentials,
- Summer Schools,
- School/Student Fairs.

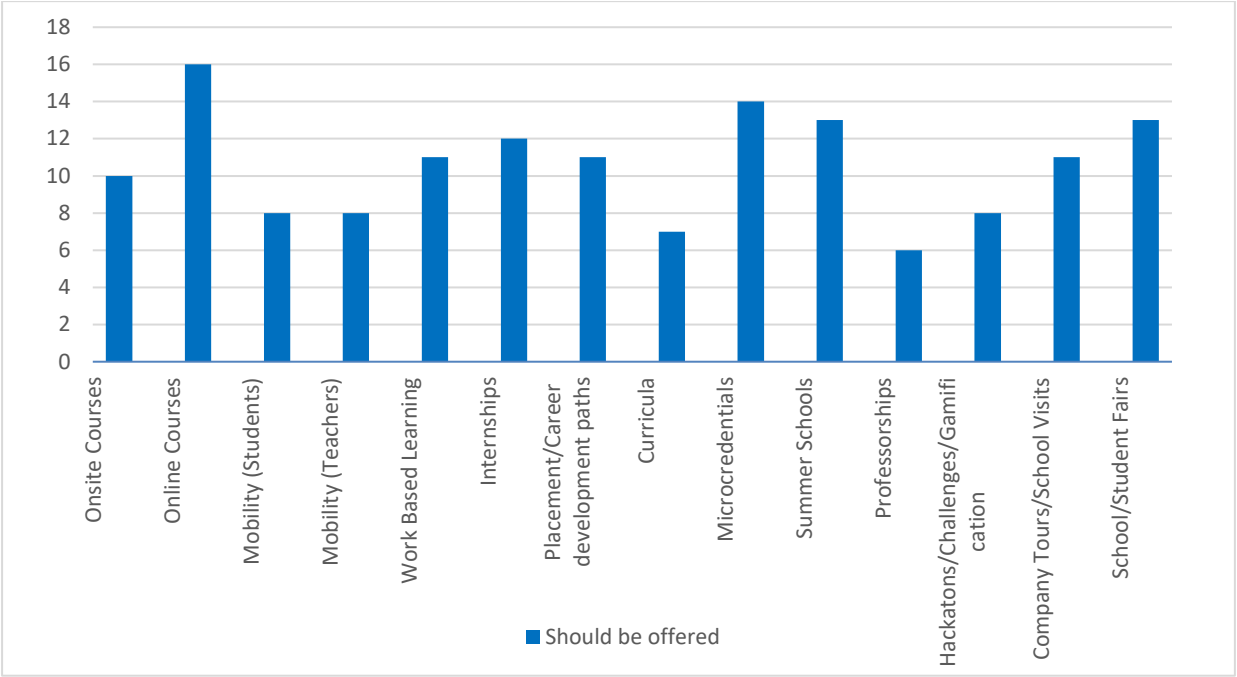

Figure 5: Which activities should be offered.

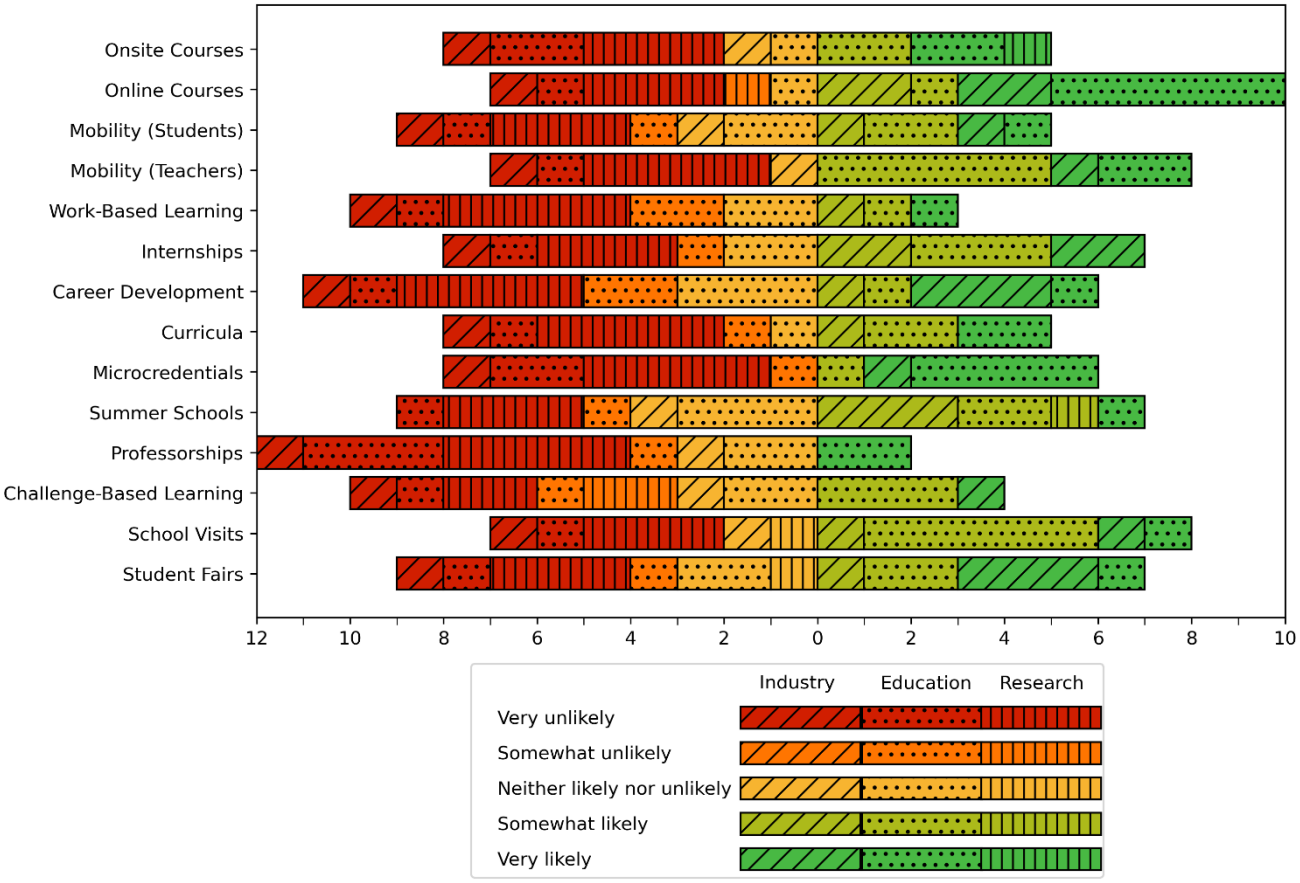

Figure 6: Likeliness of partners offering activities.

The consortium can provide educational activities ranging from EQF 3-8. However, most partners can provide activities at EQF levels 6 (Bachelor level) and 7 (Master level), as shown in Figure 7. One reason for this is that the educational partners from higher education institutions (HEIs) predominate in the consortium compared to vocational education and training (VET) providers. Nevertheless, we plan to provide educational activities for all EQF levels from lower secondary school level (EQF 3) to PhD level (EQF 8).

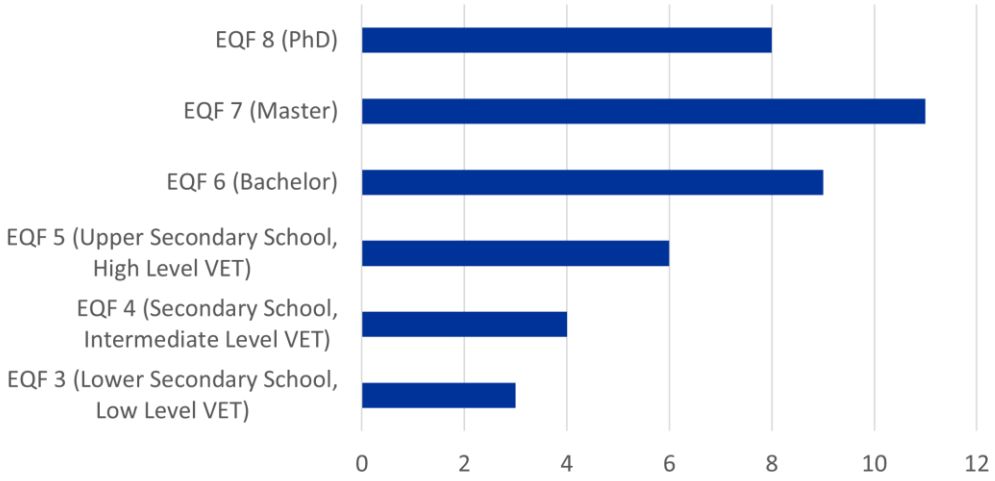

Figure 7: Which EQF levels can partners provide activities on?

Other important questions are whether ECSA's educational activities should be free of charge to students and whether partners are able to offer these activities free of charge. Figure 8 shows the opinion of all partners on whether educational activities should be free of charge. Figure 9, on the contrary, shows whether partners could provide activities free of charge. Most of the partners agree that educational activities should offer a full certificate (see Figure 10); however, only about half of the partners say that the full certificate should be free of charge (see Figure 11). Based on these results we agree to provide online unsupervised activities, without a full certification free of charge, as this satisfies more than two-thirds of the partners. Other options would be that other partners provide trailer courses for free to advertise their respective full courses. In return, ECSA can receive a commission for this advertisement and for providing its network. We will provide more details on the activities and certification in the deliverable “ECSA Educational and Pedagogical Aspects” (project identifier D3.5).

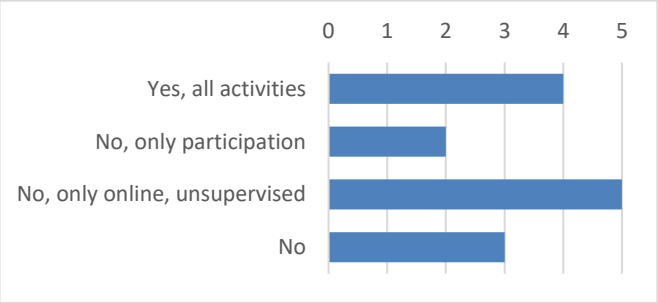

Figure 8: Should activities of ECSA be free of charge?

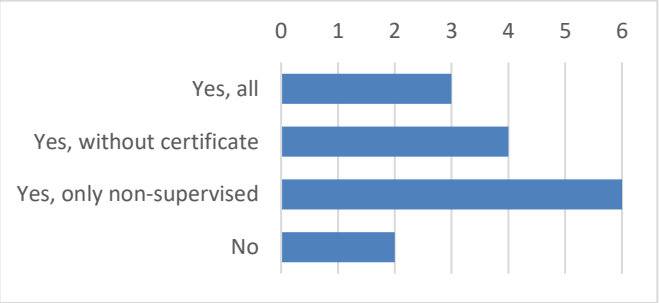

Figure 9: Can partners provide activities free of charge?

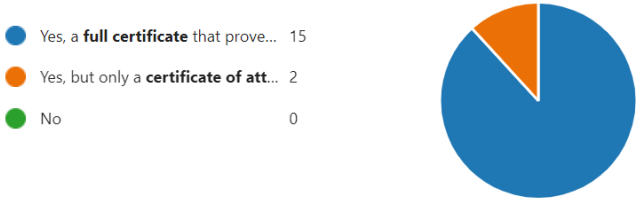

Figure 10: Should learners receive a certificate upon successful completion of a course?

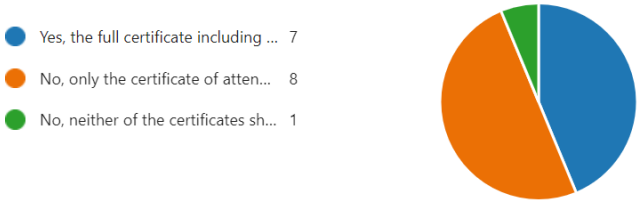

Figure 11: Should all certificates be free of charge?

2.6 Joining Efforts of Alliance, ECSA and ECDA

This section considers prerequisite questions on possible joint governance structures of the European Chips Skills Alliance, in short Alliance, this European Chips Skills Academy (ECSA) project and the sister project the European Chips Diversity Alliance (ECDA). Currently, the Alliance acts as an umbrella and covers different working groups (see Figure 12). Currently, we have established the following three working groups and put them into operation:

- Skills,
- Diversity, Equity, Inclusion and Belonging (DEIB),
- Education (including Interest & Awareness Raising).

Additionally, we plan to establish further working groups based on the needs of the semiconductor sector.

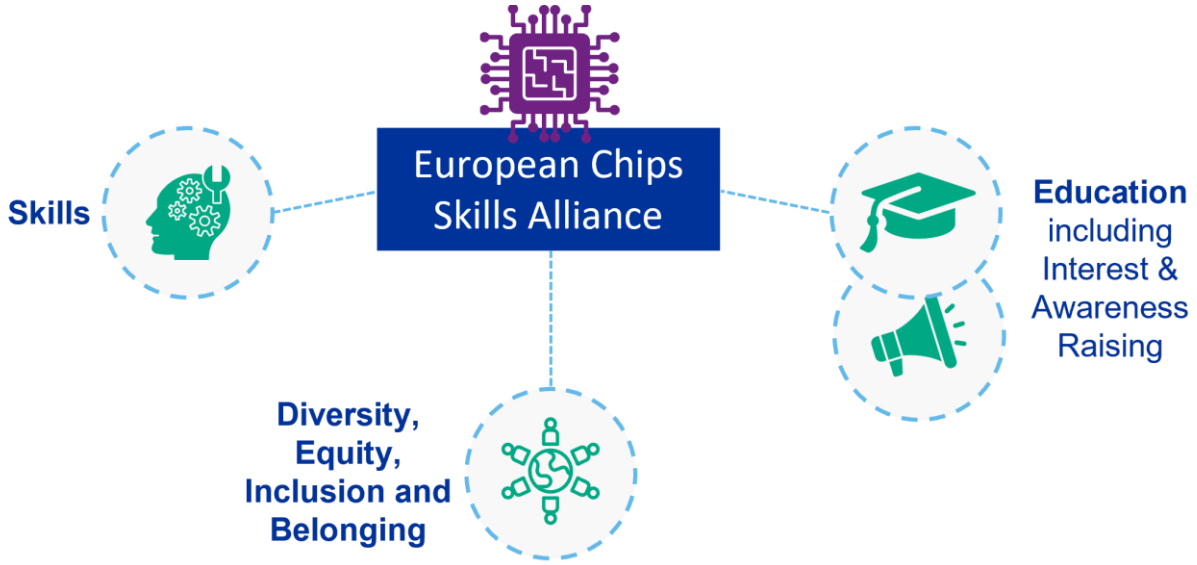

Figure 12: European Chips Skill Alliance and its working groups.

The European Chips Skill Academy (ECSA) covers the Academy (WP3, WP5), the Skills Observatory (WP3: T3.1 and T3.2) and the Interest & Awareness Raising (WP2, WP7) working groups. The Diversity, Equity, Inclusion and Belonging (DEIB) working group is covered by the European Chips Diversity

Alliance (ECDA) project[2]. The Clusters, Competence Centers are covered by the European Semiconductor Regions Alliance (ESRA)[3], which ECSA collaborates with.

As ECSA already covers three of the five working groups, partners discussed the possibility of combining the governance of the Alliance, ECSA and ECDA to avoid establishing unnecessary parallel structures within these projects and alliances. Particularly given the synergies between them, we considered that a single governance model which encompasses all workstreams would be more powerful in addressing the multifaceted goals. Therefore, we discussed this idea in the workshop and have put the most important statements to the vote. We show the results of how many partners agree or disagree on these statements in Figure 13. In the following, except for the first statement, we refer to the "umbrella" as Alliance.

Statement 1: ECSA, ECDA and the Alliance should be brought together under one "umbrella" Alliance.

There is a strong agreement within the consortium that ECSA, ECDA and the Alliance should be brought under the same umbrella. This implies, that we develop one governance model for ECSA, including the working groups of the Alliance and the topics of ECDA.

Statement 2: Members of the Alliance should contribute by a fee.

There are mixed responses on the topic of contributing to the Alliance by a fee. While most of the partners are neutral on this topic, there are some that agree and some that (strongly) disagree. This necessitates to develop other possibilities to contribute to the Alliance.

Statement 3: Instead of a fee, members of the Alliance can contribute by in-kind, e.g. universities, VET providers.

In accordance with the previous statement, all partners strongly agree to provide other means of contribution within the Alliance. This could be done by in-kind contributions. Universities could contribute to the academy part by opening university internal trainings to the public. Companies can help in the dissemination and analysis of the skills strategy and awareness-raising topics. Other partners take over the lead of one working group, etc. To establish a fair system for all current and future partners, such an in-kind contribution system needs to define and value various in-kind contributions based on some internal credits and criteria.

Statement 4: There should be different membership models within the Alliance (e.g. full members, associate members, access to different parts, etc.).

All respondents agree, that there should be different membership tiers. Members should be able to decide whether they would like to work in and benefit from only specific working groups of the Alliance or whether they would like to have a full membership and therefore access to all working groups. Therefore, we develop a tier system in the governance of the Alliance.

[2] https://diversityinchips.eu/

[3] https://www.esra-org.eu/

Statement 5: The Alliance should have agile working groups, to quickly respond to industry needs.

Most partners agree that the above-mentioned working groups of the Alliance should not be seen as rigid working groups. They should be enlarged, reduced, removed or newly developed depending on the needs of the industry.

Statement 6: The most important role of the Alliance is connecting all stakeholders (industry, universities, VET providers, research organisations, clusters, learners).

Most of the consortium partners also agree on this statement. They see networking as the most important task of the Alliance. This is in accordance with the section Mission and Goals of ECSA, where the consortium agrees that community and network building should be the most important goals of ECSA.

Statement 7: The Alliance should help in finding funding opportunities, project partners and writing project proposals on the national and European level.

About two-thirds of the partners see the Alliance as a networking organisation that should connect stakeholders and support project funding. By this the Alliance could act as platform for finding appropriate partners and support proposal writing with best practices. This again highlights the importance of the networking idea of the Alliance.

Statement 8: The Alliance should be its own association.

Again two-thirds of the partners agree that the Alliance should be its own association. Therefore, we explain various organisational forms in the following section.

Statement 9: The Alliance should mainly be funded by (follow-up) project funding.

This statement is rather controversial. While about half of the partners agree that the Alliance should mainly sustain due to follow-up project funding, some partners do not see this as a way to make the Alliance sustainable. Therefore, we put special focus on the fee structure and on the revenue streams section in the Business Modell Canvas (BMC) in the following section.

Statement 10: The educational board should be part of the governance of the Alliance.

The educational board was established in WP2 of the ECSA project and gives guidance on course creation and evaluation. When combining the Alliance, ECSA and ECDA 80% of partners agree to integrate the educational board into the Alliance, to give strategic guidance on all activities of the Alliance. Concurrently, we therefore also propose a board, that includes the other stakeholders (industry, research, policy makers) to give their valuable inputs to the Alliance. In WP5, we propose a flow of how the educational board can approve course descriptions and final courses.

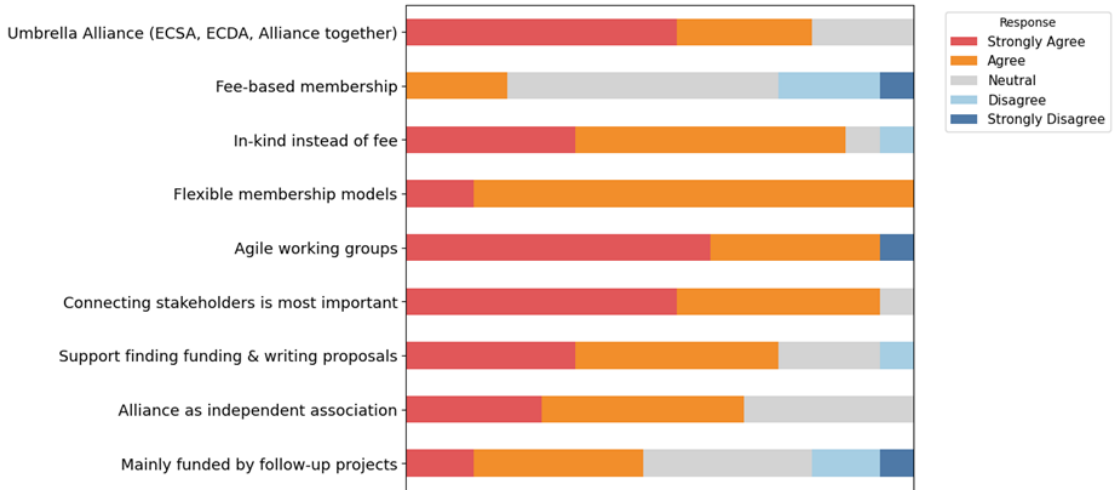

Figure 13: Statements on Alliance, ECSA, ECDA.

2.7 Non-Goals

Within the goals workshop, the consortium also discussed non-goals, i.e. goals that ECSA should not focus on. The following are the most important non-goals:

- ECSA should not get into competition with other already existing academies that provide similar content. There are various other training content providers that offer a huge variety of trainings in the microelectronics industry. With the limited funding provided in ECSA, it is impossible to catch up with well-established training providers. However, what ECSA can do is to attract these well-established academies to collaborate with ECSA and grow each other's networks.
- ECSA should not only focus on trainings and it should not become simply a repository of courses. Instead, it should focus on various initiatives to advance Europe's semiconductor industry. To name a few: networking, skills intelligence, active synergies and collaboration with other partners. These synergies are an important and unique selling points that make ECSA and the Alliance relevant at the EU level.

2.8 Analysis of Similar Academy Models

To support the design of a sustainable governance framework for ECSA beyond the project duration, we conducted a targeted analysis of comparable academy or platform models across Europe and internationally. These initiatives - from public-private partnerships to industry-run training platforms - offer valuable insights into effective legal structures, funding strategies, membership models and stakeholder governance. By examining how these academies operate and are governed, we identify transferable elements that can inform the future construction of ECSA as a credible, inclusive and value-driven initiative for semiconductor skills development in Europe.

Renewables Academy (RENAC AG)

RENAC AG is a private German stock corporation specialising in **training and capacity-building** for renewable energy and energy efficiency. Since its founding in 2008, it has trained professionals from

over 170 countries.

Features:

- Operates as a German stock corporation (AG) with a statutory board and governance defined by corporate law and its articles of association.
- Offers certified training, curriculum development, and turnkey solutions for governments, institutions, and private sector clients.
- Works with a broad network of public and private stakeholders, including policy-makers, financiers, and international development actors.
- Maintains a nonprofit subsidiary (RENAC energy & climate gGmbH) focused on publicly funded and impact-oriented educational projects.

SEMI University (SEMI U)

SEMI University is the official **education and training platform** of SEMI, the global industry association representing electronics design and manufacturing supply chains. It provides structured learning for semiconductor and microelectronics professionals, serving over 3,000 companies worldwide.

Features:

- Operates under the governance of SEMI, a nonprofit industry association with international membership.
- Centralised content development and program oversight by SEMI's global offices and expert working groups.
- Training courses are designed by industry specialists and aligned with SEMI technical standards and global events.
- Offers certified, on-demand, and instructor-led courses in areas such as semiconductor technology, workforce development, and sustainability.

Pluralsight & Pluralsight One (Social-Impact Branch)

Pluralsight is a **commercial e-learning platform** offering technology and business training through tiered subscriptions. Its social-impact division, Pluralsight One, focuses on supporting underserved communities, nonprofit partners, and digital skills development for public-good initiatives.

Features:

- Operates as a for-profit corporation, with Pluralsight One structured as a mission-aligned arm governed by its own budget, impact goals, and leadership.
- Organizationally segmented into business-focused (B2B, enterprise) and public-interest (nonprofit, education, government) units.
- Social-impact programs are guided by dedicated teams, steering groups, and strategic partnerships with NGOs, schools, and international organisations.
- Pluralsight One deploys grants, platform access, and training programs to expand digital equity

and tech workforce readiness globally.

All European Academies (ALLEA)

ALLEA is the European Federation of Academies of Sciences and Humanities, founded in 1994. It brings together over 50 national academies from more than 40 countries across Europe to collaborate on science policy, ethics, and research integrity.

Features:

- Structured as a membership-based non-profit association governed by a General Assembly, an elected Board, and a President.
- Each member academy contributes to ALLEA's strategic direction through voting rights and working group participation.
- The secretariat is hosted by the Berlin-Brandenburg Academy of Sciences and Humanities.
- Financed primarily through membership dues and project-based funding from European institutions.
- Operates thematic working groups and task forces addressing topics such as academic freedom, sustainability, and open science.

GIP-CNFM (France)

The CNFM (Coordination Nationale pour la Formation en Microélectronique) operates as a GIP – Groupement d'Intérêt Public under the French Ministry of Higher Education and Research. It **coordinates microelectronics training** across a national network of academic institutions and industrial partners.

Features:

- Legally structured as a GIP, a French public-interest group combining public and private stakeholders under multi-year agreements.
- Composed of 12 university-based training centers, national engineering schools, and industry representatives.
- Governed by a multi-stakeholder board and steering committee with representatives from academia, industry, and government.
- Publicly funded through national and regional education budgets, with long-term strategic planning and centralised coordination.
- Facilitates curriculum alignment, shared infrastructure, and national-level certification in microelectronics and semiconductor training.

Skills-Framework.eu/Skills-Hub

Skills-Framework.eu (also referred to as the Skills Hub) is a **European initiative focused on aligning skills development** with emerging labour market needs, particularly in the context of green and digital transitions. It is implemented through EU-funded consortium projects involving academic, public, and private stakeholders.

Features:

- Operates under European Commission funding schemes (e.g. Horizon Europe, Erasmus+, Cedefop), with governance structures defined by formal consortium agreements.
- Coordinated by a lead institution, supported by a network of partner organisations, including universities, research institutes, and policy bodies.
- Responsibilities are shared across partners, with clearly defined work packages, milestones, and deliverables.
- Overseen by steering groups and advisory boards, ensuring alignment with EU policy goals and sector-specific strategies.
- Focuses on standardising skill frameworks, developing learning outcomes, and producing scalable tools and recommendations for vocational education and workforce planning.

EU Code Week

EU Code Week is a **European Commission initiative promoting digital literacy and computational thinking** through grassroots coding activities. It engages educators, students, and the general public across Europe and beyond through workshops, hackathons, and online events.

Features:

- Operates under the coordination of the European Commission's Directorate-General for Communications Networks, Content and Technology (DG CONNECT).
- Implemented through a decentralised governance model with a network of national coordinators who organise and support local activities in their countries.
- Supported by volunteer ambassadors, schools, NGOs, and public institutions, often acting autonomously within a shared framework.
- Maintains a central digital platform for activity registration, data tracking, and promotion across all member states.
- Combines central policy alignment with bottom-up flexibility, enabling high scalability and community ownership.

Energy Transition Academy (ETA)

The Energy Transition Academy is a **global capacity-building program** launched by RMI (formerly Rocky Mountain Institute). It focuses on empowering energy professionals—especially in emerging and developing economies—to lead and manage clean energy transitions.

Features:

- Operates under the umbrella of RMI, a non-profit organisation headquartered in the U.S. with a mission-driven governance structure.
- Guided by strategic advisory committees, regional partner networks, and expert working groups, ensuring contextual relevance and equitable access.

- Programs are designed and delivered in collaboration with local utilities, governments, and technical experts, emphasising peer learning and applied training.
- Offers fellowships, self-paced learning, and leadership tracks tailored to public-sector energy practitioners and grid operators.
- Funded through philanthropic foundations, bilateral donors, and international development partners.

SEMATECH (U.S. Chips Consortium)

SEMATECH is a **U.S.-based public–private research consortium** originally established in 1987 to strengthen the semiconductor manufacturing industry through collaborative R&D. It played a foundational role in shaping advanced semiconductor technologies and industry standards.

Features:

- Simple, flexible, industry-focused governance with strong member influence.
- Initially funded by the U.S. Department of Defense and governed jointly by member companies from the semiconductor industry.
- Operates as a nonprofit consortium, with governance through a board of directors representing participating firms and public stakeholders.
- Member-driven agenda setting: technical priorities, project scopes, and funding decisions are steered by industry-led working groups and technical councils.
- Facilitates pre-competitive research, shared infrastructure, and standardisation across the supply chain.
- Although its influence declined after federal funding ended in the early 2000s, its model continues to shape similar consortia worldwide.

Renewable Energy Institute (REI)

The Renewable Energy Institute (REI) is a UK-based nonprofit organisation dedicated to advancing renewable energy, energy efficiency, and sustainability through education, training, and professional certification. It operates internationally and partners with industry, academia, and government institutions.

Features:

- Structured as a nonprofit training and research institute, with operations aligned to public-benefit goals and international capacity-building.
- Governed by an internal management board, with oversight of program quality, partner relations, and curriculum development.
- Collaborates with a broad network of affiliated trainers, universities, and accredited bodies to ensure global applicability and professional standards.
- Offers a portfolio of certified online and in-person courses, often tailored to organisations or country-specific regulatory contexts.

- Engages in partnership-based delivery, working alongside ministries, energy agencies, and NGOs to expand renewable energy expertise globally.

Electronics and Software Based Systems Austria (ESBS-Austria)

ESBS-Austria is an industry-driven national research and innovation platform committed to advancing the fields of micro and nanoelectronics, embedded systems, and systems integration in Austria.

Features:

- Structured as a collaborative national platform focused on research, development, and innovation (RDI) for electronic and software-based systems, with the goal of supporting Austria's technology leadership and competitiveness.
- Operates with industry-driven priorities, uniting companies, research organisations, and academia across electronic-based system sectors.
- Governed by stakeholders representing a broad spectrum of Austrian technology areas, with strategic oversight for expanding member visibility, network development, and framework conditions.
- Acts as a connector for R&D organisations, researchers, academic partners, and companies employing people in EBS-relevant areas at multiple locations across Austria.
- Engages in events, conferences, and initiatives strengthening Austria's presence in the European electronic-based systems ecosystem.

ESBS-Austria's mission is to foster collaboration, address industry needs, and drive innovation by integrating software with electronics as a fundamental pillar of modern systems.

Summary

Based on a review of ten established academy models in Europe, the US and global platforms, we can identify several governance, legal and operational patterns that are relevant for the European Chips Skills Academy (ECSA). The following elements highlight the structural lessons that emerge from this comparative analysis.

Legal form and institutional anchoring

Models such as RENAC (AG/GmbH structure) and SEMATECH (non-profit consortium) demonstrate the advantages of formal legal forms that combine liability protection with operational suitability for multi-source funding. Regardless of whether it is a public-private consortium, a non-profit foundation or a hybrid corporate structure, such entities allow strategic flexibility while maintaining clear governance. In particular, the GmbH/AG forms in the German context show how lean governance can still enable robust training activities with international reach.

Board composition and oversight

Almost all of the models examined emphasise the importance of balanced multi-stakeholder boards with representation from academia, industry and independent experts. This governance feature ensures both strategic legitimacy and operational relevance and allows the academy to respond to labour market trends while maintaining public accountability. Models such as GIP-CNFM and ALLEA

have such a balance built into the DNA of their governance systems.

Governance structure and operational leadership

Effective academies - such as Pluralsight or REI - operate with dedicated leadership teams, often divided into business units or task-based project areas. This 'multi-BU' logic, adopted from the private sector, allows for scalable management across different areas, such as training delivery, curriculum development, liaison with partners and quality assurance. It also facilitates a clear line of leadership per mission, a best practice that ECSA could emulate.

Working groups and agile coordination

The use of agile, dedicated working groups is widespread. Whether as part of REI, ALLEA or the Skills Framework initiatives, thematic clusters focused on curriculum, skills mapping, or stakeholder engagement allow flexibility to adapt to new needs. They are usually semi-autonomous, time-limited and driven by measurable outcomes - an ideal structure to support ECSA's sector-specific tasks.

Quality assurance and certification frameworks

Models such as RENAC and REI maintain strict quality assurance protocols based on ISO standards or international certification bodies (e.g. Galileo Master Certificate). The integration of such certification systems increases the credibility and transferability of academic credentials and can facilitate the subsequent development of micro-credentials or modular ECSA learning pathways. Linking to the Europass or EQF levels is a logical next step.

Funding approaches and financial resilience

A variety of funding strategies are evident: membership fees (ALLEA), grant funding (ETA, GIP-CNFM), in-kind corporate contributions (Pluralsight One), and co-branded sponsorships (REI). Funding from multiple sources is not only a factor in resilience but also a signal to leadership that allows academies to serve multiple audiences without relying too heavily on a single funder.

Review, evaluation and accountability

Most platforms employ cyclical review mechanisms, ranging from academy self-study audits (as with REI or the national EU Code Week structures) to external stakeholder feedback loops. This not only strengthens continuous improvement but also the confidence of funders and public sector partners. ECSA can establish similar routines, ideally linked to EU-level competence assessment frameworks (e.g. CEDEFOP).

The structural elements of these ten models suggest that high-performing skills academies succeed through a combination of legal formality, stakeholder-inclusive governance, operational agility and diversified funding. These findings support the ECSA model and provide a solid foundation for scaling, sustainability and impact under the EU Chips Act.

We summarise the most important governance elements with examples and their suitability for ECSA in Table 1.

Element	Examples	Fit for ECSA
Legal Form	Not-for-profit consortium (SEMATECH), GmbH/AG (RENAC), GIP (CNFM)	Ensures legal clarity, eligibility for EU funding, and liability coverage
Board Composition	Balanced representation (industry, academia, VET) with independents	Supports legitimacy, co-ownership by sectors, and EU-wide credibility
Executive Structure	Multi-unit teams with mission-specific leads (Pluralsight, REI)	Enables leadership per training track and scalable delivery
Working Groups	Agile, mission-focused groups (e.g., skills intelligence, networking)	Quick response to needs, aligns with partner pressures
Quality & Certification	ISO-based QA, external certification (RENAC, REI) and EQAVET	Enhances trust, enables micro-credentials, links to EQF
Funding Approaches	Mixed funding: grants, memberships, in-kind (Pluralsight, ETA, ALLEA)	Reduces dependency on single source, supports long-term planning
Review & Accountability	Self-audit, public reporting, stakeholder feedback (EU Code Week, REI)	Builds transparency, supports continuous improvement and trust
Flexibility	Industry-led but public–private hybrid (Sematech)	Keeps ECSA adaptive, mission-focused

Table 1: Summary of governance elements.

3. Business Model and Governance Structure

This section describes the governance structure of ECSA. Based on the jointly developed business model, we derive the organisational structure of ECSA, necessary working groups, participation models, decision-making processes, etc.

3.1 Business Model

We jointly develop the business model for ECSA by taking the ideas and feedback of all consortium partners into account. To get an overview of possible business cases and models, we use the so-called Business Model Canvas (BMC) tool[4]. In Figure 14 we show the consolidated version of the BMC of all partners. The BMC's most important part, around which everything else evolves, is the value proposition, i.e. the mission and goals of ECSA. To the right of the value proposition, the focus lies on the customers, answering questions such as how we can address these customers and how we can earn revenue. To the left of the value propositions, the focus lies on the needed partners and resources, as well as the implied costs to offer our value propositions. We explain each of the value propositions in the following section 3.1.1.

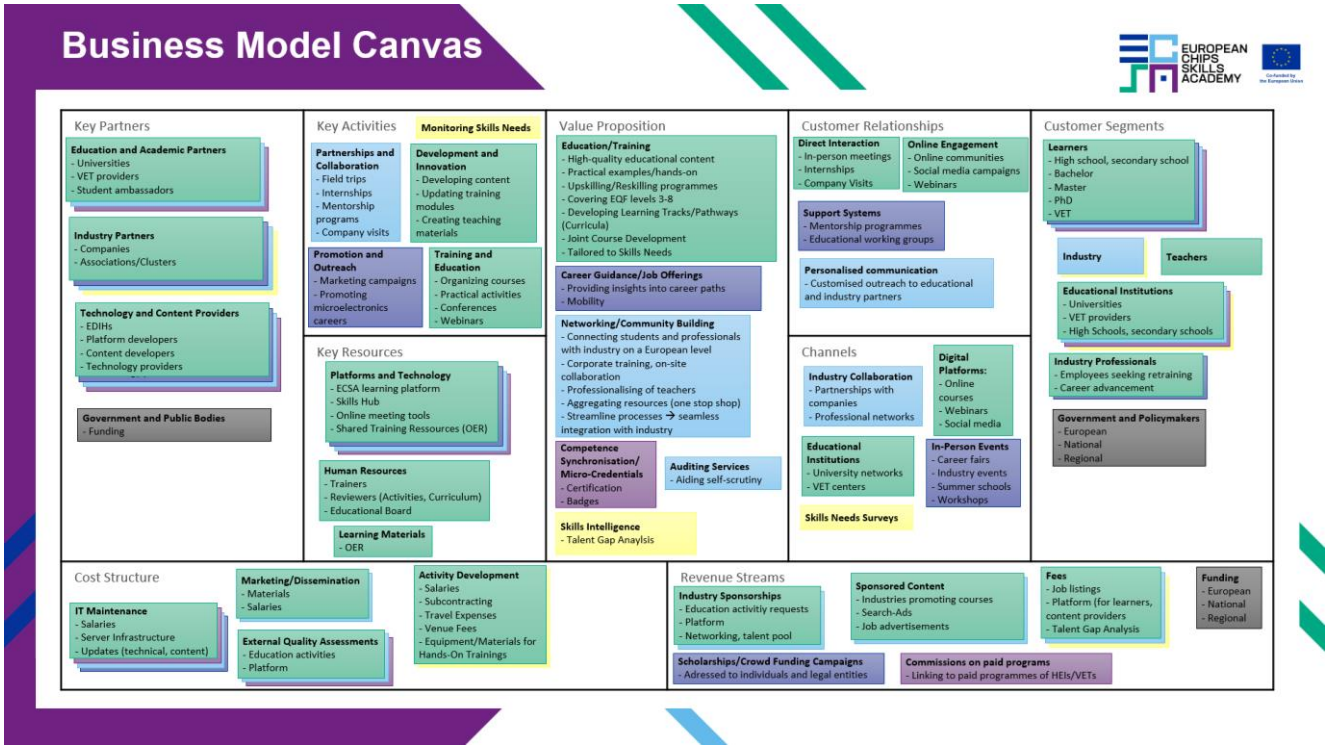

Figure 14: Business Model Canvas of the European Chips Skills Academy.

[4] For a detailed explanation of the principals of the BMC please follow this link: https://wearekatapult.eu/tools/business-model-canvas/.

3.1.1 Value Propositions

The ECSA business model includes the following main value propositions, that we deduce from the mission and goals in section Mission and Goals of ECSA.

1. **Networking/Community Building**

   Connecting learners, teachers and professionals within the microelectronics industry poses another vital value proposition of ECSA. The connecting points are manifold. On the one hand, learning resources can be aggregated and shared among all stakeholders of ECSA. By developing open educational resources (OERs) learning content and processes can be developed further and shared more easily. On the other hand, learners and teachers could learn from industry professionals through on-site trainings and practical examples coming from the industry.

2. **Education/Training**

   This value proposition includes all educational activities that we will offer through ECSA. A detailed list of all types of educational activities is presented in Deliverable 3.5, which includes well-known online and offline courses, but also summer schools, internships etc. The educational activities, which can also be jointly developed, cover EQF levels 3 to 8 and can therefore be used for initial education and reskilling but also for upskilling. All educational activities are developed based on the outcomes of the skill strategy that is summarised in Deliverable 3.2 and are therefore tailored to the needs of the industry. Further on, we group the courses into thematically fitting tracks/pathways to provide learning experiences based on university curricula.

3. **Skills Intelligence**

   Based on the Skills Anticipation Methodology in Deliverable 3.1 and the results in the Skills Strategy in Deliverable 3.2 ECSA performs yearly updates to monitor the demand and supply for skills. This enables ECSA, to provide suggestions on urgently needed educational activities.

4. **Career Guidance/Job Opportunities**

   Another important value proposition is to provide information on career opportunities. Microelectronics technology is sometimes difficult to grasp, especially for young people. Correspondingly, it is difficult to explain the various professions in the field of microelectronics. Therefore, we aim to inform potential learners of the possibilities and career opportunities in this professional field. This includes career pathways, but also information on mobility opportunities.

5. **Competence Synchronisation/Micro-Credentials**

   Certification and mutual recognition of learning achievements is another aspect in which ECSA aims to align the interests of internal and external project partners. On the one hand, we plan to provide micro-credentials that are based on the recommendations of the European Commission. On the other hand, we would also like to introduce a gamification aspect for learners by providing badges for individual educational activities.

6. **Auditing Services**

   ECSA could also provide auditing services for training organisations, thereby aiding the self-scrutiny of companies and educational providers (schools, VET providers, universities) in the microelectronics sector.

3.1.2 Customer Segments

The customer segments that we offer the value propositions for consist of the various stakeholders in the microelectronics value chain: ECSA offers benefits for individuals, such as learners, teachers and industry professionals, but also to industrial and educational institutions as well as, governmental institutions and policymakers on regional, national and European levels.

1. **Learners** on secondary school level up to PhD level (EQF 3-8) are provided with high quality educational activities that can be verified by a certificate. Furthermore, they can connect with the microelectronics community, build their own network and start/advance their career.
2. **Teachers** can benefit from best practices examples, including pedagogical and didactical aspects. Further on, they can join forces with other teachers and industry professionals by jointly developing and using open educational resources (OERs) for their courses. We see teachers as very important customers on the one hand, but also as key partners on the other hand, as they can act as a multiplier to disseminate topics of the semiconductor industry into schools.
3. **Industry Professionals** can use the educational activities for reskilling and upskilling as well as the networking opportunities to advance their careers.
4. **Educational Institutions** can again utilise synergies with other education providers by sharing OERs. Additionally, they can benefit from the results of the constant monitoring of skills and from industry promotion efforts to create incentives for their courses.
5. **Industry** gains access to a large talent pool of learners at various educational levels. In addition, they can also send their employees to ECSA courses and actively counteract future talent gaps with the information obtained from the skills strategy.
6. **Governments and Policymakers** at regional, national and European level benefit from a more profitable industrial sector and the strengthening of these industrial regions, but also of Europe as a whole. Further on, they can share and adapt best practices with other industrial sectors and are better informed when it comes to decision-making.

3.1.3 Customer Relationships and Channels

The Customer Relationships and Channels are crucial to build the bridge between the customers and the value propositions. ECSA establishes various types of relationships to interact with potential existing customers. On the one hand, there is direct interaction through in-person meetings, but also internships, company visits, and mentorship programmes. On the other hand, ECSA reaches out to customers through online means, such as communities, social media campaigns or webinars. Finally, ECSA can also send personalised communication through the ECSA learning and networking platform. ECSA aims to establish all of these customer relationships through digital platforms, events, collaboration with industry and education, and by skills strategy surveys.

3.1.4 Key Partners

The opposite side of the BMC describes the key partners. They are crucial for offering the various value propositions of ECSA.

1. **Educational Partners,** such as higher education institutions (HEIs) or vocational education and training (VET) providers, are responsible for educational activities and the recognition of these activities. Further on, they support network building. Teachers at every school level are also important partners in disseminating the content of ECSA and thus act as multipliers, as they can reach a large number of young learners.
2. **Industry Partners** are vital for establishing professional communities and providing career opportunities. Additionally, they support educational activities by providing external lecturers who give industry insights.
3. The term **technology and content providers** summarises all partners, that are responsible for the platform, content and other technologies to make ECSA function as intended. A possible cooperation partner is the European Digital Innovation Hub (EDIH), which provides “one-stop-shops” for specific topics.

3.1.5 Key Activities and Resources

Along with the key partners come the key activities and resources needed to provide ECSA’s value propositions. The key resources include the ECSA learning platform, open educational resources (OERs) and meeting tools to enable education and network building communities. The Skills Hub is used for competence synchronisation and career guidance by connecting educational activities with the European Skills, Competences and Occupations (ESCO) framework. Furthermore, ECSA requires human resources, such as trainers to develop educational activities, reviewers who validate these activities and an educational board to decide on the future developments. The key activities include development and update of educational materials, as well as the organisation of educational activities either online or onsite. Another important activity involves the dissemination and promotion of all value propositions as well as establishing partnerships to collaboratively organise field trips, company visits, etc.

3.1.6 Revenue Streams

The revenue streams include all income that ECSA receives from customers for the value propositions offered. In Europe, education is mostly available for free or at rather low costs for learners. Therefore, the ECSA business model proposes alternative financing options besides traditional participation fees for students and learners.

1. **Fees**

   Traditional fees can include platform fees, for learners or content providers, but also fees for job listings or fees for providing the talent gap analysis. Some basic courses could act as teaser courses, linking to more advanced courses, that require a fee. Another option is to charge a fee for the certification.

2. **Sponsored Content**

   Another option is to provide sponsored content within ECSA, e.g. learning providers or industries promoting their courses on the ECSA platform, or placing search advertisements.

3. **Industry Sponsorships**

   Furthermore, ECSA can provide educational activities that are specifically requested and sponsored by the industry. In this way, ECSA provides the platform and develops the learning materials, whereas companies can benefit from upskilling of their work force and being provided with networking opportunities and a large talent pool.

4. **Commissions on paid programs**

   External training providers could provide basic educational activities through the ECSA platform. Ongoing activities, which include practical exercises, could then be provided externally. ECSA could establish a referral system to obtain a commission if some learner subscribes to a paid programme, e.g. live-long-learning (LLL) programme of an HEI or a programme of a VET provider.

5. **Scholarships/Crowd Funding Campaigns**

   Scholarships and crowdfunding campaigns could also be considered with regard to a few or individual learners. However, this does not pose a general solution as this would only tackle a small percentage of the learners.

6. **Ongoing Funding**

   Finally, ECSA will investigate the possibility of applying for ongoing funding on the regional, national or European level, to further develop and improve the features of ECSA.

In the section Joining Efforts of Alliance, ECSA and ECDA we show that partner participation fees are a very controversial point, even among the consortium partners, as ECSA cannot expect a high financial contribution. Therefore, ECSA respectively, the Alliance will need to rely on other revenue streams and on in-kind contributions. We describe the in-kind contribution model in section 3.2.5.

3.1.7 Cost Structure

The cost structure includes all costs associated with the key activities and resources, respectively with providing the value propositions to the customers. The costs can be split into the following categories.

1. **Activity Development**

   Developing and delivering learning activities is a major cost factor of ECSA, as these activities require resources, especially human resources, in the preparation phase, but also when courses are delivered. In accordance with the non-goals defined in section 2.7 ECSA will therefore primarily advertise and share courses on partner's sites and act as a training hub.

2. **Maintenance**

   Keeping all infrastructure up-to-date and running is another requirement to make the results of ECSA available beyond the project duration.

3. **Marketing/Dissemination**

   Dissemination is a crucial part of gaining new customers and to keep existing ones. This includes all networking events, webinars, social media, advertising etc.

4. **External Quality Assessment**

   External quality assessments are required to review and validate the activities of the ECSA. Therefore, this is also considered a cost factor.

Based on the workshop results, about 50% of the partners said, that they could contribute to the sustainability of ECSA by in-kind contributions instead of contributing financially. In-kind contributions can significantly reduce the costs to offer ECSA's value propositions. Therefore, it is important to develop a fair and transparent procedure to track, account for, and compare the in-kind contributions of partners.

3.2 Governance Structure

In this section, we describe the governance structure for the joint governance of the Alliance, ECSA and ECDA. We explain the preference of the consortium to not use a two-pronged approach and to keep the complexity of various governance models low in section 2.6. Therefore, we base the governance on the model, that we established in "The Governance model for the European Microelectronics Pact for Skills Secretariat" (project identifier D2.1). Therefore, we integrate the governance of ECSA into the overarching governance model of the Alliance, which was established earlier in the project's lifecycle to formalise the Working Group and strategic oversight structures.

3.2.1 Governance Model

In Figure 15 we describe the joint governance model of the Alliance. At the centre there is the Alliance board. This board is responsible for operational decisions, is advised by various advisory boards and supervised by all members of the Alliance. The Alliance board controls the management director, who runs the day-to-day business and manages the individual working groups respectively the working group lead. The working group lead is then responsible for the teams that carry out individual tasks. These teams are flexible and can be introduced and discontinued based on the current needs of the Alliance. The individual teams report to their working group leaders, the working group leaders communicate horizontally among the working group leaders and report to the management director. The management director is accountable to the Alliance board, whereas the Alliance board is accountable to all members of the Alliance, who are responsible for the strategic alignment of the Alliance.

To summarise, there are three decision levels in the governance model: strategic decisions are made democratically by the General Assembly with the help of the Alliance board and its advisory boards, and operational decisions are made by the Alliance board. The day-to-day business is run by the management director. We provide more details on the decision-making processes in section 3.2.2.

We describe the exact election processes for the boards and working groups in deliverable "ECS-Academy Operational Features and Tools" (project identifier D3.4).

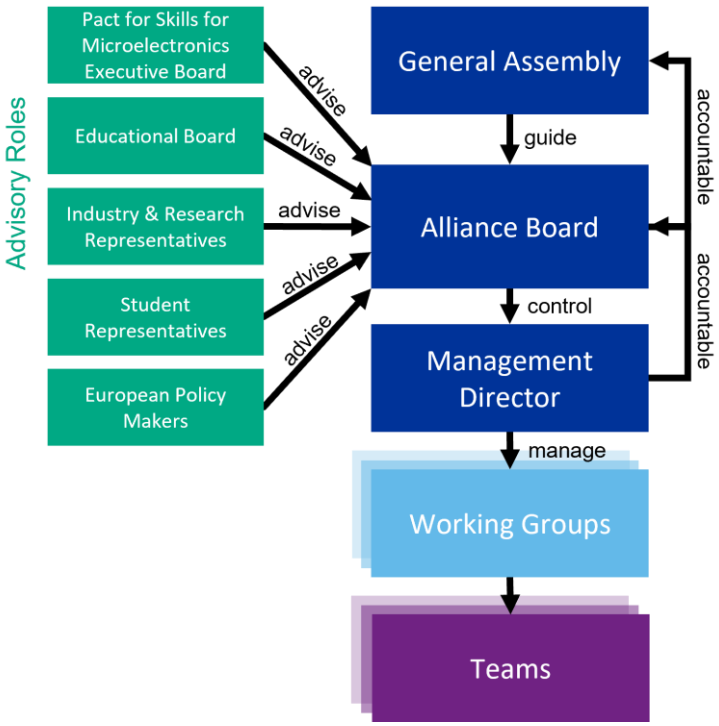

Figure 15: Joint Alliance Governance Model.

Alliance Board

The Alliance board is responsible for operational decisions within the Alliance. The board consists of a maximum of ten Alliance members, to ensure that it works as efficiently as possible, but still represents all relevant stakeholders in the semiconductor ecosystem. We therefore propose that the Alliance board should consist of:

- one industry cluster organisation,
- three industry partners, with preferably one small or medium enterprise (SME),
- one research organisation,
- two higher education institutions (HEIs),
- one vocational education and training (VET) provider,
- one soft skill/social partner and
- one competence center (network).

During the project duration, the Alliance board will mainly consist of the project internal members to ensure that the project requirements and KPIs are met. Towards the project closing, we will subsequently open the board to other members of the Alliance. We provide more details on the transition of the governance model towards the end of the project in section 3.5.

Advisory Boards

The advisory boards support the Alliance boards in their decision-making processes. We propose the following advisory boards to support the Alliance board, based on the most important stakeholders:

- **Pact for Skills for Microelectronics Executive Board**

  The Pact for Skills for Microelectronics Executive Board was established in 2019 and is composed of high-level representatives from the semiconductor industry, specifically those in charge of talent development, human resources, or related business fields. Its intended to set the strategic vision and objectives for the European Chips Skills Alliance, guiding activities to tackle skill shortages and boost Europe's competitiveness in the microelectronics sector. The Board convenes at least twice a year to review progress, set priorities, and ensure coordination among stakeholders involved in the upskilling and reskilling agenda for microelectronics across Europe.

- **Educational Board**

  The educational board was established in work package (WP) 2. It consists of at least 10 (as of July 2025: 18[5]) members from HEIs and VET providers. The members are chiefly responsible for providing strategic guidance on the development of educational materials and courses throughout the lifetime of the ECSA project to ensure relevance, alignment with skills needs, and comprehensiveness. In the long term the Board will serve as the foundation for an enduring Educational Leaders network for microelectronics, by providing guidance to the Alliance board. More details on the educational board can be found in Deliverable D2.2 "The ECS-Academy Educational Board".

- **Industry & Research Representatives**

  Industry and research are also given the opportunity to help shape the Alliance. This board will therefore represent the interests of these stakeholders and provide guidance from an industry and research perspective. These perspectives will be especially important when it comes to networking, career guidance and skills intelligence.

- **Student Representatives**

  An important goal of ECSA is the acquisition of talent, especially among students and learners. It is therefore important to give this group an advisory role in the Alliance. As part of the ECSA project's dissemination activities in WP7, we have already set up a student ambassador programme[6], whereby student ambassadors distribute the goals and results of ECSA among their peers and also provide us with feedback from students.

- **European Policy Makers**

  Policy makers play a significant role in deciding on the direction of the European semiconductor ecosystem and how the industry should or will evolve. It is essential that the Alliance board can adapt to such decisions as quickly and efficiently as possible. It is therefore important that the alliance board receives input from the policy maker board.

[5] Members of the educational board: https://chipsacademy.eu/alliance/educational-leaders/.

[6] Student ambassador programme: https://chipsacademy.eu/uncategorized/join-ecsa-student-ambassadors/

Management Director

The management director is responsible for day-to-day operations and acts as an interface to the working groups via the working group leaders. Mandatory qualifications for the person of the management director include strong business acumen and project management skills, as well as stakeholder management skills. This person should have basic financial knowledge and effective communication skills. Further on, they should be able to inspire, motivate and lead teams. Experience in education management and risk management is preferred. In addition, the management director should have good analytical skills and experience in managing alliances or large partnerships. Optional qualifications for this position also include an affinity for finance, e.g. knowing how to create and present a business case.

Working Groups

Based on the most important missions and goals of ECSA and the Alliance in section 2.1 and based on the working groups of the Alliance (see section 2.6 and deliverable "The Governance model for the European Microelectronics Pact for Skills Secretariat" (project identifier D2.1)), we propose the following working groups and their connection with the value propositions.

- **Skills Working Group**

  The skills working group monitors skills trends and emerging job profiles in the semiconductor industry. By conducting surveys, interviews or focus groups with relevant stakeholders and using other statistical sources, this working group collects and consolidates data and helps to quantify the talent and skills gap in Europe.

  This working group will mainly contribute to the skills intelligence initiatives in the Alliance. Mandatory qualifications for members of this working group are skills in data acquisition and data analysis. Additionally, they should have a good network to obtain data and information from, should have experience in forecasting future skills trends and should have good knowledge of the semiconductor industry.

- **Education Working Group**

  The education working group links education with industry and research. It helps to develop new trainings, updates existing ones and proposes pilot programmes. Another important task is to assess and validate existing trainings and to create tracks and pathways for learners. Additionally, this working group aims to strengthen the image of microelectronics and raise awareness of job opportunities and career paths in the sector. It works to create joint image campaigns, show role models and inspiring testimonials.

  This working group will mainly contribute to the goal of developing education/training and to competence synchronisation and auditing services. Mandatory qualifications for members of this working group role include having didactic experience, expertise in curriculum design and the accreditation process, and technical skills in course development, particularly AI tools. Optional qualifications include experience with European tools such as EQVET, EQF, and ESCO, and experience in data collection and analysis.

- **Diversity, Equity, Inclusion and Belonging (DEIB) Working Group**

  The DEIB working group checks whether the Alliance adheres to the principles of diversity and equal and inclusive opportunities in the microelectronics industry. It provides recommendations on the promotion of STEM among women and other underrepresented groups, raises the attractiveness and awareness of microelectronics job profiles and enhances employability.

  This working group will mainly contribute to the goals of providing career guidance, job opportunities, and operational tools for employers and educators to assess and improve the inclusivity of their processes. Mandatory qualifications for members of this working group role include a commitment to the principles of diversity, equity, and inclusion as well as experience in areas such as implementing inclusive hiring procedures, bias training, and mentorship programmes. Members should have experience in collaborating across diverse teams, including underrepresented or marginalised groups.

As of September 2025, the skills and education working groups are already established, while the DEIB working group is currently being defined and put into operation until the end of 2025. If necessary, further working groups will be added or removed based on the feedback of stakeholders and decided by the Alliance board.

3.2.2 Meetings and Decision Making

It is important to plan regular meetings and define decision-making structures so that the Alliance is always up-to-date and can act and react to changes adequately.

Table 2 summarises the most important meeting types, their frequency, and the needed majorities for decisions. The general assembly is open to all members of the Alliance and takes place once a year. In this meeting, important strategic decisions on the direction and focus of the Alliance are made. Every member is entitled to vote, and decisions are made on the basis of a simple majority (>50%). If a member company/organisation is represented by multiple individuals, they must nominate a single representative who is empowered to vote on behalf of the member. The Alliance board, including the management director, meets four times a year. The management director reports to the board. Decisions are made by the board members and require a qualified majority of two-thirds of its members ($> 66.67\%$). The advisory boards and other members can observe the meeting and provide their advice. The management director meets with the working group leads monthly to share updates on the daily business. There are no operative strategic topics planned to be decided in these meetings. If questions arise, these questions are dealt with in the Alliance board. The working group leads organise meetings for their respective working groups whenever there is a need for a meeting.

Meeting Type	**Frequency**	**Decision Limit**
General Assembly (All Alliance Members)	Yearly	Simple Majority $> 50\%$
Alliance Board + Management Director	Quarterly	Qualified Majority $> 66.67\%$
Management Director + Working Group Leads	Monthly	n.a.
Working Group	Flexible	Simple Majority $> 50\%$

Table 2: Frequency of meetings and decision limits.

3.2.3 Membership Models

In section 2.6 we describe that the ECSA partners prefer to have different levels of membership in the Alliance. Based on these membership levels, members have different access rights. We therefore suggest the following membership levels:

- **Full Membership**

  With a full membership, members can participate in all working groups and benefit from the results through early access. Members with full membership are also entitled to vote at the general assemblies and may also become part of the Alliance board.

- **Associated Membership**

  If there is interest, we plan to introduce a lightweight membership for SMEs, HEIs, VET providers and non-semiconductor related companies, which cannot benefit from the alliance to the same extent as enterprises. In this case, participants have non-priority access to all working groups, but no voting rights.

Membership fees are determined and amended by the Alliance Board. For individual cases, Alliance members may make in-kind contributions that partially or fully replace a financial contribution. The Alliance Board decides whether a partner may make a partial or full in-kind contribution.

3.2.4 Fee-Based Membership

We develop a tiered, fee-based membership model for the full membership. Based on the type of membership, we distinguish between large enterprises, small and medium enterprises, research organisations, universities and VET providers, clusters and social partners. In Table 3, we summarise the membership fee for the individual types of members, in relation to the full membership fee of a large enterprise or company (100%). Further on, the associated membership fee is set to be 5% of the full membership of large industry members.

Type of organisation	**Full membership fee (relative)**
Large enterprise/company (> 250 employees)	100%
Small and medium enterprise	50%
University and VET provider	30%
Research organisation	30%
Cluster	30%
Associated Membership	5%

Table 3: Tiered full membership fees, based on member types.

The full membership fee will be first determined based on the financial requirements that we obtain between the launch of the Alliance and the end of the project. Within this 1.5-year timeframe until the project end (February 2026 to September 2027), all costs are covered by the ECSA project. By

documenting all necessary financial requirements during this time, we will then deduce a suitable value for the full membership fee. The membership fee will be reviewed annually by the Alliance Board, and changes to the Full Membership fee need to be approved by the General Assembly.

3.2.5 In-Kind Contribution Models

In section 2.2 we show that no project partner could commit to contributing financially to the Alliance. However, many project partners indicated that they could contribute by in-kind to the goals of ECSA resp. the Alliance. In order to guarantee fairness among all members, we develop an in-kind contribution model, such that the contributions of each partner can be valued against a membership.

There exist various possibilities to contribute by in-kind. Therefore, we introduce a system to credit in-kind contributions. We list the most common contributions in Appendix A – List of Eligible In-Kind Contributions (Non-Comprehensive) and associate them with credits. These credits are a rough estimate and can be adjusted accordingly based on the effort, that a member actually had documented. All in-kind contributions should be documented by the contributing member, including a rough estimate of the time effort. The management director collects this documentation and can, if necessary, adjust the credits for each in-kind contribution. The list of in-kind contributions is updated annually by the Alliance board based on previous experience.

The in-kind contribution credits can be associated with the membership types. We therefore propose the equivalences based on Table 4. A full one-year membership for a large enterprise is equivalent to 100 in-kind credits, and the associated membership is equivalent to 5 credits. Within the Alliance, these values can be adjusted based on the experience gained up to that point.

Membership Type (one year)	**In-Kind Credit Equivalent**
Full Membership (for large enterprise)	100
Associated Membership	5

Table 4: Equivalences between membership types and the in-kind credit system.

3.3 Quality Assurance to Monitor Success of the Alliance

We develop a quality assurance plan to monitor and track how sustainable and successful ECSA and the Alliance is. Among others, this includes feedback questionnaires and Key Performance Indicators (KPIs). We describe this validation plan in more detail in deliverable “ECSA Implementation and Validation Plan” (project identifier D3.6).

3.4 Future Pressures

Besides our efforts to make ECSA sustainable after the end of the project funding, the success of ECSA will also depend on factors beyond the consortium’s influence. The Chips Act is the clearest justification for the relevance of ECSA. The Chips Act and similar legislative initiatives, such as the Quantum and Materials Acts, require relevant skills in microelectronics and emerging technologies. This makes the activities of ECSA highly relevant as it can support various skills initiatives.

European-wide initiatives like the Pact4Skills and the Union of Skills are promoting collaboration and shared standards across different sectors. The yearly skills strategy reports show current and future

skill needs. Industry and educational stakeholders use this data to update training and curricula; therefore, ECSA has an essential role to provide these skills insights.

Strong collaborations among various stakeholders in the semiconductor value chain will be key to keep European microelectronics industry, but also ECSA specifically, competitive in a global market. Therefore, connecting partners from industry, education, research, but also policy makers and soft-skill partners ensures that ECSA remains highly relevant to the sector. This again highlights the importance of networking within ECSA, be it resource sharing, proposal writing, etc.

By proactively responding to these future pressures, we will secure the relevance of ECSA in the European semiconductor ecosystem.

3.5 Transition Model

To ensure a smooth transition from the fully financed project phase to the phase after project financing, when the alliance must be self-sustaining, we introduce a transition model. In this transition model, the project activities transition towards the Alliance's value propositions. We do this to test, validate and improve the developed governance model and to bring stakeholders to join the Alliance. We apply this transition model to various aspects: The Alliance board, the goals/value propositions, the legal form and the KPIs. We plan to launch the transition model in month 29 (September 2026).

The Alliance board will consist only of eight project internal members at the launch of the transition model. This is to ensure that the Alliance will mainly focus on the ECSA project goals and activities. Further stakeholders can gradually join the board and contribute their views from outside the ECSA project. Getting views from project external members will be increasingly important toward the end of the project.

The goals and value propositions are initially very strongly linked to the tasks, deliverables and milestones of the project. The skills intelligence working group is part of WP3, the education working group is dealt with in WP4 (platform) and WP5 (specialised training), the interest and awareness raising and the inter-regional collaborations working groups' tasks are tackled in WP2 (network building) and WP7 (dissemination). The DEIB working group's tasks are dealt with in the ECDA project. Towards the end of the project, the individual work package tasks will transition to the working groups of the Alliance.

As described in section 3.2.4, we will determine the operational costs for the Alliance within the transition period from the launch of the Alliance towards the end of the project. This allows us to estimate the costs very accurately and thus offer our members fair value for money.

The legal form during the project is based on the project grant agreement. Therefore, no legal entity is established. Based on the answers of the consortium partners in section 2.4, at this stage, we plan for the Alliance to become an association sans but lucratif (ASBL). This allows to have a low entry barrier for partners and provides a neutral framework, such that all partners can participate without the perception of commercial advantage.

Further on, some project KPIs can also be adapted and used as KPIs for the Alliance. We will summarise all KPIs to measure the success of the Alliance in deliverable "ECS-Academy Implementation and Validation Plan" (project identifier D3.6).

By introducing this model, we ensure that the transition from the project governance to the Alliance governance is as smooth as possible and helps to make the Alliance self-sustaining. We provide more information on the Implementation and Validation of the governance model in the deliverable “ECS-Academy Implementation and Validation Plan” (project identifier D3.6). Based on the feedback during the transition model, we can adapt the governance and functions of the Alliance accordingly.

4. Conclusion and Next Steps

In this deliverable, we describe the governance model of ECSA, and the European Chips Skills Alliance, the Alliance. Based on the vision of ECSA and the prerequisites that we obtained from all project partners, we come to the conclusion that it makes sense to develop a joint governance for the Alliance, that fulfils an "umbrella" function already now. Therefore, we developed a business model and derived the governance structure for the Alliance. We explain the various functions of the Alliance board, the advisory boards, the management director and the working groups, the associated meeting frequencies and decision-making procedures. Further, we describe different membership models that the Alliance could offer and how in-kind contributions could be accounted towards memberships. Finally, we describe future pressures and a transition model, of how we could transition the project implementation structure to the governance of the Alliance towards the end of the project.

This deliverable, in conjunction with deliverable "ECS-Academy Operational Features and Tools" (project identifier D3.4), fulfils the milestone "ECS-Academy Governance and Functioning" (project identifier MS8).

This deliverable, in conjunction with deliverable "ECS-Academy Operational Features and Tools" (project identifier D3.4) partly contributes to the KPI "ECS-Academy established with operational configuration of teaching, learning, professorships, WBL, mobility, etc." (project identifier KPI #8). The deliverable "ECS-Academy Operational Features and Tools" will provide the formal documentation of the Alliance (Terms of Reference, Code of Conduct) and operational (EU) tools that are necessary to run the Alliance. Further on, we propose updates of ESCO profiles based on the courses developed in WP5.

The next steps are the milestone "Launch of ECS-Academy" (project identifier MS8). The launch will be based on the governance of the Alliance in this deliverable, but also on the specifications described in the deliverables "ECS-Academy Operational Features and Tools" (project identifier D3.4), "ECS-Academy Educational and Pedagogical Aspects" (project identifier D3.5) and "ECS-Academy Implementation and Validation Plan" (project identifier D3.6). After the launch the governance will be thoroughly assessed and if necessary, appropriate adjustments will be made to the governance model.

Acronyms

BMC	Business Model Canvas
DEIB	Diversity, Equity, Inclusion, Belonging
ECDA	European Chips Diversity Alliance
ECSA	European Chips Skills Academy
EDIH	European Digital Innovation Hub
ESCO	European Skills, Competences and Occupations
HEI	Higher Education Institution
KPI	Key Performance Indicators
MS	Milestone
NPS	Net Promoter Score
OER	Open Educational Resource
RTO	Research and Technology Organisation
SME	Small or Medium Enterprise
STEM	Science, Technology, Engineering and Mathematics
VET	Vocational Education and Training
WP	Work Package

Appendix A – List of Eligible In-Kind Contributions (Non-Comprehensive)

This is a non-comprehensive list of eligible in-kind contributions and their valuation using the in-kind credit system. Credits are accumulated throughout the year and reset to 0 at the start of each calendar year. Credits accumulated during the previous calendar year are used to determine membership level for the following year.

General

Contribution	**Credits**
Post/share information on the Alliance/ECSA on social media	1 per post
Organise an event ≥ 50 persons or ≥ 2 days	100
Organise an event < 50 participants and < 1 day	50 per event
Platform maintenance (website, learning/networking platform)	100
Participation in the Alliance board	100
Lead a Working Group	100
Attend Working Group meeting(s)	5 per meeting
Refer new members to the Alliance	5 per member

Skills Intelligence

Contribution	**Credits**
Respond to skills survey	5
Conduct an interview	10 per interview
Analyse skills survey	100

Education

Contribution	**Credits**
Create a course	20 per course
Review an existing course (for quality control, referral for content update)	5 per review
Host an ECSA Student Forum	10 per forum

Career Guidance

Contribution	Credits
Offering an internship	5 per internship
Participate in an ECSA career fair	5
Share job openings on the ECSA platform	5 per share
Host an ECSA Student Ambassador Summit	20 per summit