Deliverable D3.1 - DEI SUITE SYLLABUS

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CONTENT

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Executive summary

This document outlines the content, structure, and learning objectives of the DEI Training Suite for the microchips industry and serves as a roadmap for developing training courses and operational tools aimed at promoting diversity, equity, and inclusion (DEI) in the semiconductor sector. It provides details on the learning objectives, primary target groups, training structure, training methods, and a framework for evaluating the training.

The syllabus was developed through collaboration among project partners, incorporating inputs such as an internal mapping of existing activities across partner institutions totalling over 40 trainings. It also draws on survey and qualitative interviews on the needs and priorities of the semiconductor sector conducted in WP2 and insights from an online brainstorming workshop and a focus group input. Furthermore, desktop research on DEI training and competence frameworks contributed to the document's development.

Based on this input an outline of the training program consisting of five thematic modules was drafted. The modules are (1) Understanding DEI, (2) My role in DEI (everyday interactions), (3) Integrating DEI in employee life cycle, (4) Inclusive leadership and finally (5) Bridging the gap: educator-industry collaboration for diverse talent. For each of the modules comprised of individual courses - learning units were proposed. Content of these courses will be further developed in the coming months.

The focus of the training program extends beyond semiconductor companies, aiming to foster closer collaboration between employers and educators to enhance the visibility and appeal of career opportunities in the sector for diverse talent and support the talent pipeline. The programme proposes learning paths for four distinct target groups, encompassing both the business and education sectors. These target groups include: (1) industry staff, (2) middle management and professionals involved in HR and DEI management, (3) organisational leaders, and (4) educators in both HEI and VET sectors. While students were considered as a potential target group, the decision was made to focus on educators as multipliers instead. However, some of the proposed courses may still be relevant for students. Special emphasis is placed on supporting industry professionals in SMEs, as they often lack the resources to develop tailored DEI solutions, unlike larger companies. The syllabus includes a brief description of each group, with more detailed learning profiles to be developed as the learning units are created.

To ensure the accessibility and sustainability of the training programme, the consortium decided to prioritize the development of on-demand online content as the primary mode of delivery. This content will be integrated into the e-learning platform of the European Chips Skills Academy (ESCA), making it directly available to the main target groups. However, where possible, opportunities for live interaction will also be utilized, and recommendations for adapting the training to live, in-person formats will be provided.

Given the variety of topics and target groups the programme aims to address, a flexible approach to designing learning paths and recognizing learning outcomes is essential. The syllabus proposes two alternative approaches: learners can either create their own learning paths by selecting courses that align with their individual needs, without the requirement to complete entire modules, or they can follow one of the five predefined learning paths represented by five training modules. Depending on their level

of involvement, learners may have their outcomes recognized in different ways, with micro-credentials being considered as one potential option.

This syllabus is an open document that will be further updated as the work on the development of learning units evolves. The next step in developing training is the creation of five working groups that will develop detailed descriptions and content of learning units proposed for each of the five learning modules. To facilitate their work, the syllabus includes the template for learning units' descriptions as well as glossary of basic terms to ensure the common understanding and use of key concepts across all learning units.

A virtual meeting to review this deliverable was held on January 29, 2025, with ECDA work package leaders, Diversity in Chips Leadership Board members, and representatives from associated partner organizations in attendance. The meeting had a total of 31 participants. Participants provided valuable feedback during the meeting, with a strong representation from the microelectronics industry.[1]

[1] The list of participating organizations is provided in Annex 4 of this document.

Introduction

This DEI Training Suite aims to address diversity, equity and inclusion challenges from the perspective of the semiconductor industry, requiring an understanding of sector-specific obstacles and needs. To explore these needs, the ECDA project implemented several activities that have contributed to the design of the training programme.

The survey, conducted with 74 respondents representing a variety of roles and organisations within the semiconductor sector, provided valuable insights into the industry's main priorities and challenges in the field of DEI. The results revealed that, when asked about various diversity dimensions, gender diversity consistently emerged as the highest priority, followed by age diversity, skillset, and racial & ethnic diversity. Disability and neurodiversity are also emerging areas of focus. Retaining talent is currently the most significant motivator for organisations' DEI efforts and investment, followed by considerations of reputation & brand, talent acquisition, and regulatory requirements. Over the next three years, retaining talent will remain the top priority, but attracting talent is expected to become a more important driver than reputation. When asked about current priorities for their organisation's DEI initiatives (from a list of 10 factors), employee experience was identified as the most important, followed by talent pipeline, recruitment, and inclusive leadership. In the next three years, however, the focus is expected to shift, with talent pipeline becoming the top priority, followed by recruitment, employee experience, and inclusive leadership. The challenges most significantly impacting organisations' DEI initiatives currently include the lack of clear goals and metrics, limited budget and time resources, and insufficient data and insights.

Qualitative interviews were conducted with 14 sector representatives to gain a deeper understanding of sector priorities and motivations. The key desired impacts that respondents identified for the ECDA project include building a robust talent pipeline, enhancing the sector's visibility, fostering inclusive leadership, improving collaboration across organisations and the ecosystem, and positioning the industry as a leader in addressing global challenges such as sustainability. Respondents highlighted talent shortages, diversity gaps, branding issues, economic cyclicality, and global competition as the main challenges facing the sector. Potential solutions for positive change that ECDA could contribute include strengthening educational outreach, modernizing the industry's brand, promoting DEI initiatives, fostering collaboration, and enhancing workforce stability. Leadership commitment, data-driven decision-making, and cultural openness were identified as critical capabilities that organisations need to address these challenges. The ECDA is seen as a key enabler in driving advocacy, partnerships, resources, and innovative pilot projects to achieve these objectives.

Another target group that provided valuable insights consisted of young professionals in the semiconductor industry (aged 20 to 30), who participated in a focus group during the SEMICON fair. When asked about ECDA's role in supporting them and others in the industry, participants suggested that ECDA should help make DEI a priority across generations and raise awareness of differences in practices. Topics such as intercultural challenges and implementing DEI-sensitive hiring and recruitment practices were highlighted. ECDA can also help increase awareness of DEI within the STEM student population and schools. Participants emphasized the importance of communication, specifically the need for inclusive language, and proposed creating storytelling and social media tools. The key role of community support, along with the importance of role models and mentors, was also discussed.

In addition, a mapping of existing practices at project partner institutions was conducted, resulting in a database of 43 activities. These activities vary in terms of delivery method (27 online, 13 onsite, and 3 hybrid), duration (ranging from 45 minutes to semester-long courses), and formats and methods, including seminars, workshops, gaming, storytelling, and experiential training. The majority of activities (28) do not focus on a specific diversity dimension, though some are centred on gender (5), neurodiversity (4), racial/ethnic diversity (1), skillset (2), and physical ability (2). Overall, the mapping demonstrates that the consortium has a solid foundation of expertise and practical experience in delivering DEI training.

Insight: Research on effective DEI training

DEI training has become widely accessible, with platforms like UDEMY and COURSERA offering an extensive selection of courses on the subject. This growing focus reflects the commitment of organisations to fostering inclusive workplaces. A 2022 study by SD Worx[2], involving 4,371 companies across 14 European countries, revealed that 53% of organisations now offer internal training on DEI, underscoring its importance in today's professional landscape. But what makes effective DEI training?

In their systematic review Monica L. Wang et al [3] examine the effectiveness of diversity, equity, and inclusion (DEI) and antiracism training programmes across various organisations. The systematic review encompasses peer-reviewed studies published between 2000 and 2022. Key findings reveal significant variability in training characteristics, including curriculum content, objectives, delivery methods, and evaluation metrics. The authors recommend several strategies to enhance the efficacy of DEI trainings including shift focus from individual knowledge to fostering behavioural and organisational change and longitudinal training formats rather than one-off sessions.

According to a review study by Kim & Roberson[4] on implicit bias training, most programmes focus on intrapersonal skills, such as raising self-awareness, recognizing biases, and employing self-regulation to mitigate biased behaviours. However, they often neglect interpersonal skills critical for addressing bias in social and workplace interactions. This paper suggests expanding training to include interpersonal strategies for managing implicit bias, incorporating exercises in identifying bias in various contexts, improving confrontation methods, and addressing defensive reactions effectively. It also recommends supporting behavioural changes through goal setting and practice plans tailored to real-world scenarios.

[2] See SD Worx (2024) *Four out of Ten Companies in Europe Do Not Have Active Neutral Recruitment*.

[3] See Wang L.M., Gomes A. et al. A systematic review of diversity, equity, and inclusion and antiracism training studies: Findings and future directions

[4] See Kim, J. Y., & Roberson, L. (2022). I'm biased and so are you. What should organizations do? A review of organizational implicit-bias training programs

1. Structure of the training and training objectives

The overall goal of the training programme is to:

1. Raise awareness of DEI's contribution to organisations in the semiconductor industry and build understanding of key terms and concepts in relation to DEI among current and future staff members.
2. Provide the tools and strategies for different target groups to develop and adopt effective DEI actions and contribute to safe working environment for everyone.
3. Facilitate collaboration between industry and education sector to develop joint strategies contributing to better access to opportunities in semiconductor industry for underrepresented groups.

To achieve these goals, a training program consisting of 5 training modules is being proposed with each module including 5-8 learning units. The five modules are included in the following image.

The main objective of the first module is to enhance participants' understanding of DEI concepts, their application in addressing workplace challenges and their relevance to the semiconductor industry.

The second module aims to empower industry staff to contribute to safe and inclusive workplaces by building self-awareness and empathy and possessing strategies to intervene in inappropriate workplace situations.

The third module aims to equip middle management and professional staff, especially in small organisations such as SMEs, with the knowledge and tools to develop and implement meaningful, effective, and resource-efficient DEI actions.

The main objective of the fourth training module is to empower organisational leaders to champion DEI by understanding its strategic, long-term value and adopting practical strategies for inclusive leadership, access, fairness and representation.

The key objective of the fifth module is to help educators build a diverse talent pipeline for the semiconductor industry by fostering inclusive teaching practices, addressing STEM barriers, and inspiring students to pursue careers in microelectronics.

2. Main target groups

The program aims to address four distinct target groups spanning both business and education sectors. These include: (1) DEI industry staff, (2) executives (3) middle management and (4) educators in higher education institutions (HEI) and vocational education and training (VET) .

Although students were considered as one of the main target groups, the focus shifted toward empowering educators as key multipliers. However, some of the proposed courses may still be relevant for students and therefore we also address them in the following descriptions. For industry professionals, the programme is particularly beneficial for SMEs and their employees, as these organisations often lack the resources to create custom solutions compared to larger companies.

The following descriptions provide a basic profile of each target group, with more detailed learner personas to be developed alongside the learning units addressing characteristics such as motivations for learning about DEI, influences, technology habits and personality traits.

2.1 All staff members

This group comprises employees across all levels within the semiconductor industry who may be new to the concepts of Diversity, Equity, and Inclusion (DEI). They have diverse professional backgrounds and job roles but share a common need for foundational knowledge. Their time is often limited due to job demands, and they prefer concise, practical learning experiences.

The key characteristic of this group include:

- **Time-constrained**: Learners have limited availability for training, so content needs to be accessible and time-efficient.
- **General interest**: They require a broad and basic introduction to DEI that is relevant and inclusive for everyone, regardless of their role.
- **Practical focus:** Emphasis should be placed on informal and practical applications rather than strategic planning or high-level implementation.
- **Empowerment-oriented**: Training should use general, non-technical language and aim to inspire excitement and empowerment about DEI and its impact on talent and inclusive workplaces.
- **Interactive learning:** Incorporating opportunities for engagement and informal exchange in discussion board, affinity groups or embodied case studies / games / learning activities such as quizzes.

2.2 Executives

This group includes high-level executives and leaders within the semiconductor industry who play a critical role in shaping organisational culture and driving DEI initiatives. They are decision-makers with significant influence and are often pressed for time, requiring tailored, concise, and impactful learning experiences.

The key characteristic of this group include:

- **Time-constrained**: Leaders have demanding schedules, so training should be brief, focused, and flexible to accommodate their availability.
- **Strategic focus**: They need a high-level overview of DEI concepts with a focus on business imperatives, strategic implementation, goals, targets and measurable outcomes.
- **Interactive & Blended Learning**: A combination of online and in-person sessions with hybrid options is preferred for flexibility and engagement allowing for them to engage in social learning and providing opportunities to develop a community of practice.

2.3 Middle management

This group includes employees in middle management in SMEs operating in the semiconductor industry, as well as professional roles involved in HR and L&D, especially in talent and performance management. The focus is on the professionals in the companies with limited resources for developing and implementing DEI strategies.

The key characteristic of this group include:

- **Time-constrained**: These professionals have limited time for training. Content must be efficient, practical, actionable and highly accessible.
- **Majority group dynamics**: Many learners belong to dominant demographic groups in the workplace and need relatable yet inspiring DEI training that bridges personal and professional contexts.
- **Practical orientation**: They prioritize actionable content such as toolkits, step-by-step manuals, and tips to implement DEI initiatives effectively within constrained budgets.
- **Outcome-focused**: Learners need to balance short-term performance metrics with the long-term outcomes of DEI implementation.
- **Sector-specific needs**: Interest in outreach toolkits for attracting and engaging talent pools like graduates, educators, and apprentices.

2.4 Educators

This group includes managers, educators, and career advisors from Higher Education (HE) and Vocational Education and Training (VET) institutions, primarily within STEM fields, crucial for shaping the future workforce in the semiconductor industry by bridging academic knowledge with industry needs.

The key characteristic of this group include:

- **Time-constrained:** Learners have limited availability for training, so content needs to be accessible and time-efficient.
- **Knowledge multipliers**: They influence diverse student populations, making them potential multipliers of DEI principles in education.
- **Responsibility for inclusive learning environments:** They require specialized training to design inclusive curricula, foster safe and engaging learning environments, and address barriers faced by underrepresented groups in STEM.

- **Limited knowledge of business environment**: In general, the target group is not familiar or only partially familiar with the specifics of the workplace and processes in the business environment.
- Extra time for reflection on activities

2.5 Students

The group includes students from diverse backgrounds currently studying in STEM fields enrolled in higher education institutions (HE) and vocational education and training (VET) programmes. They are the talent industry wants to attract.

The key characteristic of this group include:

- **Digital generation:** They are used to digital environments. Compared to other target groups might require different, shorter formats.
- **Open to change:** They are generally more open to questioning biases and adapting their attitudes, making them receptive to DEI principles. Many students are enthusiastic about advocating for fairness and justice, making them potential champions for DEI in their communities and beyond.
- **Limited real-world exposure**: They may lack direct experience with workplace or systemic inequities, necessitating relatable, real-life examples to contextualize DEI concepts.

In addition to the previously mentioned groups, the project consortium team will also participate as a learner group. The team members bring diverse expertise, with some having a stronger background in the industry and others in DEI. This diversity highlights the need for collective learning to ensure alignment and shared understanding among all members. At the same time, it presents a unique opportunity to involve project members in piloting the training programme.

3. Proposed structure of training modules

Module 1: Understanding DEI

This module is aimed for all target groups of the training. After completing module learners should be able to:

1. Discuss and describe what DEI is, as well as associated terms, and provide examples of the fundamental concepts of (DEI) in the semiconductor industry.
2. Identify various diversity dimensions, understand the barriers these groups face and define and identify intersectionality within DEI.
3. Discuss and describe what unconscious bias is and how it affects our decision making.
4. Understand why DEI is an important function within the workplace in general and in semiconductor industry specifically.
5. Provide examples of applications of DEI in the workplace and discuss the opportunities and challenges of DEI.
6. Discuss the semiconductor industry with external stakeholders with ease, particularly with respect to DEI.

Learning units included in the module:

1. What is DEI and why is it important (in semiconductor industry)	The learning unit provides a fundamental overview of Diversity, Equity, and Inclusion (DEI), emphasizing its significance. Participants will gain insights into the relevance of DEI in the semiconductor industry, situate the topic within a broader context, and prepare for deeper engagement with its key concepts and themes.
2. Understanding motivators and barriers to DEI in Semiconductor industry	The learning unit focuses on what drives progress and hinders the development of Diversity, Equity, and Inclusion (DEI) in the semiconductor industry. Practical examples illustrate these dynamics, highlighting real-world challenges and successful initiatives that have influenced DEI outcomes in the sector.
3.Exploring diversity dimensions	The course provides insights into different dimensions of diversity addressing: • **Neurodiversity**, highlighting the value of diverse cognitive abilities. Participants will explore the stigma often associated with neurodivergent individuals and the significant challenges they face. Practical insights and strategies will be provided to foster a more inclusive environment that supports neurodiverse individuals and maximizes their potential. • **Experiences of LGBTQ+ individual**s, focusing on the stigma and barriers they often encounter. Participants will gain a deeper understanding of the challenges faced by LGBTQ+ people and explore practical strategies to create a more inclusive environment that respects and supports diverse sexual orientations and gender identities. • **Experiences of individuals with disabilities**, highlighting their challenges

	regarding accessibility, inclusion, and equity. Participants will gain insights into creating an environment that provides necessary accommodations, fosters a culture of acceptance, and empowers individuals with disabilities to thrive professionally. • **Racial and ethnic diversit**y, addressing the challenges faced by individuals from diverse backgrounds, including systemic biases and inequities. • **Age-related diversity**, focusing on ageism, generational differences, and the value of diverse perspectives across age groups and the unique strengths and challenges of multigenerational teams.
4. Exploring diversity dimensions: focus on gender diversity	The learning unit examines typical gender roles and stereotypes that shape professional interactions and opportunities. Participants will gain a deeper understanding of how these perceptions impact decision-making, career progression, and team dynamics, thereby becoming more aware of the need to challenge stereotypes and promote gender equity within the semiconductor industry.
5. Navigating Intersectionality: Understanding diverse identities in the workplace	This unit introduces the concept of intersectionality, exploring how overlapping identities such as race, gender, age, and disability influence individuals' experiences. Participants will gain a deeper understanding of how intersecting factors can amplify challenges or create unique opportunities for marginalized groups.
6. Understanding how humans make decisions (and how this is related to DEI)	The unit explores the cognitive processes that drive human decision-making and how biases and heuristics impact our choices, particularly in the realm of Diversity, Equity, and Inclusion (DEI). Participants will learn how unconscious biases can shape hiring, promotions, or team dynamics.
7. Questions you were afraid to ask	This unit provides a safe space for participants to address complex or sensitive questions about Diversity, Equity, and Inclusion (DEI).

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Module 2: My role in DEI

Main target group of this module: all staff members, educators, students. After completing module learners should be able:

1. Describe the role they play creating safe and inclusive working environment.
2. Build self-awareness and empathy and recognize unconscious bias and its impact.
3. Recognize stereotypes and microaggressions, understand their effects, and gain skills to respond to them constructively.
4. Gain tools and strategies to intervene in inappropriate workplace situations safely and effectively and to foster a sense of belonging through advocacy and collaboration.
5. Gain awareness of cultural differences and learn techniques to manage cultural misunderstandings.

Learning units included in the module:

Understanding unconscious bias and its workplace impact	This learning unit aims to provide a foundational understanding of unconscious bias and its adverse effects in everyday workplace situations. Practical strategies for counteracting unconscious bias at an individual level and fostering an inclusive mindset will also be presented.
Identifying stereotypes and microaggressions in the workplace	This unit explores how unconscious biases and stereotypes can lead to various forms of microaggressions. The effects of microaggressions on colleagues will be examined, and guidance on how to respond to microaggressions in the workplace will be provided.
Bystander Interventions	Participants will learn how to actively contribute to creating a safer and more inclusive organisational culture. They will be equipped with practical tools for safely intervening when witnessing or experiencing inappropriate behaviour.
Active allyship	This unit focuses on the importance of intentional effort by individuals or groups to support and advocate for marginalised or underrepresented communities. Participants will be introduced to various strategies for being effective allies. Through practical techniques and real-world examples, they will develop skills to advocate for others and foster a culture of belonging.
Empowerment and resilience	The unit focuses on self-empowerment, helping employees build resilience and confidence in the workplace. Participants will explore practical strategies to overcome DEI related challenges, assert themselves, and navigate professional obstacles with strength.
Behaving and communicating inclusively	Learners are invited to look at their own behaviours in relation to inclusion. Learners will have an opportunity to deep-dive into the signature traits of inclusive leadership outlined in the previous module. To conclude the session, participants will equip themselves with practical advice on inclusive communication, including the use of inclusive language.

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Module 3: Diversifying your workforce

Main target group of this module is middle management and professional staff involved in HR and DEI. After completing module should be able to:

1. Assess DEI maturity in organisations and set goals across the employee lifecycle.
2. Identify practical tools and strategies to support DEI goals in organisations in semiconductor industry.
3. Provide examples of how to utilize DEI as a strategic tool for employer branding in the semiconductor industry and share success stories illustrating feasible and impactful DEI implementations.
4. Evaluate solutions for engaging diverse talent pipelines, including undergraduates, apprentices, and educators.
5. Identify effective t DEI tools and strategies applicable in SMEs and other organisations with limited resources.

Learning units included in the module:

Diversity in the Employee Life Cycle - an overview - the 4Ps	This module addresses the operative level of diversity management in key organisational processes. This first learning session identifies relevant key concepts and stakeholders that can contribute to diversifying the workforce and help create an attractive, equitable and inclusive workplace.
Defining key metrics, goals and targets	To chart progress on inclusive development and to identify needs and successes, measures (qualitative and quantitative) are necessary. This learning unit will provide key insights into the Employee Life Cycle - attract, develop, promote, retain and help identify key metrics. In doing so, this training will help aid developing meaningful goals and targets across the ELC for diversity and inclusion.
Building and promoting a diverse and inclusive organisational brand	In this training, participants learn how diversity can enhance the employer's brand - the perceived identity of your organisation by the public - to source actively diverse talent for the industry. The content proposed here – includes storytelling that reflect lived inclusion both internally and externally.
Democratize recruitment & building inclusive hiring processes	This training session considers both recruitment and hiring together as integral to cast a wider talent net and considers best practices and policies for hiring. Recruitment includes specific, targeted recruitment - demographically tailored recruitment programmemes, referral recruitment - as well as getting line managers involved in the recruitment process. The latter can serve both as ambassadors and potential mentors for talent. The session will introduce a suite of practices to hire diverse talent.

Fair and equitable performance review	This session considers barriers and biases that inform performance reviews in organisations. So-called micro-inequalities have a significant impact on career progression of women and under-represented group, which pervade criteria applied to gendered pay and career decision. In this training, participants will learn will learn about practices to debias evaluation processes, so all employees have equitable chances to advance in their organization.
Engaging employees in building inclusive workplace	This training session focuses on the organisational strategies that help create access to learning and building communities & networks, such as employee resource groups to help engage all employees with learning and diversity. Participants learn about effective interventions and their pitfalls such as mentoring, allyship, unconscious bias trainings and networks for underrepresented groups.
Organizational strategies for management & employee engagement	This training shifts its focus on managing and engaging all employees in the inclusive workplace development. It looks at organizational best practices and common pitfalls to ensure success of inclusive development for all. With a focus on engaging manager , we consider how transparency and social accountability can be encouraged to improve inclusion outcomes.
DEI in SMEs - Strategies and best practice	This training session considers effective and pragmatic measures that can be implemented in SMEs. The aim of this training is to provide learning that can be implemented with the business objective. In turn, it will aid SMEs in building awareness and opportunity around diversity and inclusion as an asset.

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Module 4: Inclusive leadership

Main target group for this module is organisational leaders. After completing module "Inclusive leadership" learners should be able to:

1. Explain the business case for DEI in the semiconductor industry and recognize its strategic long-term value and inspire organisational buy-in from across all organisational levels.
2. Articulate the key concepts and traits of inclusive leadership, recognizing its importance in leveraging diversity and fostering collaboration within organisations.
3. Identify and implement practices that promote psychological safety in teams fostering a sense of belonging among team members.
4. Apply strategies to combat DEI fatigue by reframing conversations around diversity, equity, and inclusion (DEI) and supporting efforts to create an inclusive environment that prioritizes equity.
5. Engage in self-reflection to assess their own behaviours related to inclusive leadership, equipping themselves with practical strategies for inclusive communication and actionable steps to enhance their leadership effectiveness.

Learning units included in the module:

Business case for DEI in Semiconductor Industry (leaders' perspective)	In this module, participants deep dive into inclusive leadership with a focus on building inclusive organisations across all of its strata. Inclusion is key to ensure organisations will accrue diversity's benefits in the future. The business case and its effectiveness are of importance here, as costs tend to be experienced immediately, while benefits last in the longer term. To illustrate, on an individual level, we face these choices problems regularly, for instance, should we exercise today to be healthier in the future? This brief introduction to the business case considers inclusion and business in diverse world.
Inclusive leadership: individual and organisational level	In this session, learners consider inclusive leadership as key to leveraging diversity and fostering collaboration. Participants acquire key concepts and learn traits associated with inclusive leadership along with practical advice on how to encourage inclusive behaviour in an organisation. Because inclusive leadership is a capacity that can be distributed across different roles, learners will reflect on its role in executive, line management, and at an employee level.
Creating psychological safety & belonging	This session helps participants understand the framework that is needed to either disrupt or sustain inclusive teams and organisations. Psychological safety - the belief that work is safe for interpersonal risk-taking - sets up the foundation. Learners will discuss and practice elements that help build psychological safety to achieve belonging, the human need to be accepted in a group.

How to manage diverse teams effectively	This training builds on the previous session. Participants learn to identify both their needs and their colleagues needs to work effectively and fairly in a diverse team. Some elements included in the training pertain todeveloping cultural competence, active listening, communication and challenges and benefits of remote teamwork.
DEI fatigue and supporting your DEI Leaders	DEI fatigue happens when DEI advocates face institutional resistance to change and when ongoing education on tough topics like race, gender inequities, and discrimination becomes exhausting. Both can result in physical and emotional exhaustion. This session invites learners to support those committed to including everyone and help reframe the conversation in terms that have equity and inclusion at its heart and make leading with purpose its core.
Leadership Development & Self Awareness	In this training, participants will learn how to foster the capacities that are key to leadership development, here specifically through the lens of gender and intersectionality - LGBTQ+ and race. Self-awareness is a specific focus in this session as it is the backbone for translating inclusive leadership knowledge into actual, inclusive behaviour.

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Module 5: Bridging the gap: Educator-industry collaboration for diverse talent

Main target group for this module is educators. After completing this module learners should be able to:

1. Describe the skills requirements of the semiconductor sector and why DEI is crucial in addressing these needs.
2. Identify barriers faced by diverse talents in STEM education and understand how unconscious bias impacts teaching practices, student interactions, and institutional policies.
3. Describe advanced techniques to create inclusive learning environments that accommodate diverse student needs focusing on both classroom practice and teaching process in STEM education.
4. Develop strategies fostering partnerships between educational institutions and industry leaders to enhance the recruitment and retention in STEM education, particularly microelectronics.
5. Distinguish a variety of career paths within the semiconductor industry and use them to inspire individuals from diverse backgrounds to pursue fulfilling careers that contribute to industry growth.

Learning units included in the module:

DEI in STEM education: spotlight on microelectronics (and related fields)	The course aims to enhance educators by understanding the importance of inclusivity in STEM education. By addressing barriers faced by diverse talents, particularly within the microelectronics field, the course helps educators to reflect on how to create equitable access to opportunities in STEM education.
Unconscious bias and its effects in educational setting	This learning unit examines the concept of unconscious bias and its impact on educational settings, focusing on how implicit attitudes can influence teaching practices, student interactions, and institutional policies. Participants will learn to identify their own biases, understand their effects on learning outcomes, and explore strategies to create a more equitable and inclusive educational environment.
Tools to attract and retain talent in microelectronics education	The course aims to provide educators with a set of tools and examples of effective strategies for improving talent acquisition and retention in STEM education. It underscores the significance of fostering DEI to cultivate an inviting atmosphere that draws in a wide array of candidates while supporting their growth.
Designing inclusive learning environments (in microelectronics Education)	This learning unit focuses on equipping educators with strategies to create inclusive learning environments that accommodate diverse student needs focusing on both classroom practice and teaching processes. It emphasizes the importance of fostering a sense of belonging and accessibility, ensuring that all students, regardless of their backgrounds, can engage meaningfully in their education.

Collaborations between industry and education to unlock potential of diverse talent	The course focuses on fostering partnerships between educational institutions and industry leaders to enhance the recruitment and retention of diverse talent emphasizing the importance of creating intentional pathways for underrepresented groups. The course aims to bridge the gap between education and industry, ensuring that diverse talent is recognized, nurtured, and integrated into the workforce.
Diverse career paths in semiconductor industry: focus on manufacturing	The learning unit provides learners with an opportunity to explore various career opportunities within the semiconductor sector, highlighting roles crucial in manufacturing process such as process engineers, manufacturing technicians, and quality assurance specialists. By showcasing the breadth of career paths available, the course seeks to inspire individuals from diverse backgrounds to pursue fulfilling careers in this vital industry.
Diverse career paths in semiconductor industry: focus on R&D and software development	The learning unit provides learners with an opportunity to explore R&D and software development related roles such as semiconductor software engineers, R&D specialists, and technology development engineers. By showcasing the importance of innovation and collaboration in advancing semiconductor technologies it aims to inspire participants from diverse backgrounds to explore inclusive career trajectories that contribute to the industry's growth.

4. Operational tools

In addition to the training content, the DEI suite will include a set of seven operational tools. These tools should be concise, practical, and designed to be read in under 10 minutes, while encouraging readers to further explore the topics. Four of the tools will be tailored for companies, and three will focus on educational settings. The specific topics for these operational tools will be determined during the later stages of training content development. Possible topics include (list is not exhaustive):

- DEI checklist for operational environment
- DEI Dos and Don'ts to avoid misunderstandings
- Walk the talk for executives: from statements to behavioural change
- From fatigue to focus: Revitalizing DEI efforts
- DEI in 100 days: quick wins and actionable DEI measures for managers
- Code of Conduct: key DEI principles for organizations
- DEI for SMEs: building inclusive workplaces on a budget
- Understanding resistance: strategies to strengthen DEI advocacy
- Short guide to organising accessible events

For educators:

- Collaboration strategies for a diverse talent pipeline in microelectronics
- Inclusive practices in the microelectronics classroom (focus on teachers)
- Making microelectronics education more attractive for diverse talent
- Exploring career opportunities in semiconductor industries
- Research careers in semiconductor industry

5. Training methods: proposed approach

ECDA project is committed to developing a training programme that prioritizes accessibility and sustainability, ensuring that learners can engage with the content on a schedule that suits them. The training will therefore use on-demand online content as a primary form of training delivery. However, whenever possible, opportunities for in-person interaction should also be leveraged and suggestion on adapting training to the form of live, in-person training should also be provided. The following text provides suggestion on formats and approaches to be used in developing the content of the training:

5.1 On demand training

On demand training content will be placed at the platform of the European Chips Skills Academy [5]and will be accessible to any registered user.

Suggested duration of **one learning unit** delivered on demand is 30 minutes (in shorter segments**)** of audiovisual content + minimum of 2 hours of additional reading time and exercises.

Each unit should use a combination of formats to maintain the interest of learners. Suggestion for different types of content to be included is summarised in the following table.

Type of content	Examples of content
Audiovisual content	• recorded lectures (original content) • recorded webinars (after necessary editing) • short videos (how-to videos, short testimonials, or interviews) • animations • podcasts
Text based content	• short blogs • infographics (using data collected in the project) • case studies (real life examples) • research papers summaries (for non-scientific audience) • personal stories (good practice) • suggested readings lists
Interactive content *(Activities allowing to apply and test the acquired knowledge and skills)*	• quizzes • cases studies (exercises) • situational analysis exercises • self-reflection exercises • games
Feedback collection elements	• polls to track the feedback of learners

For each of the training modules, trainer-led interventions should also be considered to allow deeper reflection on the topic and experience sharing and to provide learners with opportunities to ask and

[5] See https://chipsacademy.eu/e-learning/

discuss challenging questions. These can include e. g. organising Q&A sessions, live webinars, and interactive online and in-person workshops.

In particular for the learning units addressing various target groups, inclusion of target group specific content or adaptation of the parts of the content for different groups should be considered.

5.2 Live training

Description of each training module should also provide suggestions on delivering the training content in the live/synchronous setting (online or in-person).

Suggested duration of one learning module delivered live is 8 to 16 hours of contact hours (divided into shorter sessions**).** Depending on the organisation of the training, outside class activities can also be included (if allowed by the schedule of the training).

The methods used in the live training should focus on providing space for interactivity and a more hands-on experience. As in the case of on-demand, asynchronous training, a combination of various learning techniques should be used.

Type of activity	**Examples**
Frontal teaching	• Presentations and lectures to deliver basic concepts and information. • Short videos and animations to illustrate the concepts and ideas (on-demand content can be used) • Presentations by practitioners • Moderated discussions
Challenge-based activities	• Case studies and situational analysis exercises • Training games • Knowledge-sharing sessions
Reflection-encouraging activities	• Story telling • Self-reflection exercises • Peer-to-peer interactions
Activities supporting continuous interaction and feedback	• Icebreakers and energisers • Quizzes and polls • Debriefing sessions • Peer-to-peer feedback opportunities

The role of trainer is crucial in delivering live training in either online or in-person form. Minimum requirement for trainers' qualification and experience should therefore be included in the description.

5.3 Ensuring accessibility and inclusiveness of training

All training content as well as forms of its delivery should follow the principles of accessibility and inclusiveness. This concerns:

- **Inclusive training design:** Inclusion should be a guiding principle of training design in ECDA project focusing on how to accommodate the needs and abilities of diverse learners and eliminates unnecessary hurdles in the learning process. There are various methodologies to support inclusive design such as e. g. Universal design for learning (UDL). [6]

- **Inclusive training content:** Training materials should reflect a variety of perspectives, cultures, and experiences. This includes using inclusive language, diverse imagery, and examples that resonate with all employees.

- **Inclusive language.** All content developed in the programmeme should use inclusive language addressing people of different backgrounds equally and making them equally visible whenever possible. Expressions that are offensive or based on stereotypes should be avoided. Check e. g. UN ESCWA guidelines on gender-sensitive language.[7]

- **Accessibility of online content:** Materials should be usable for individuals with varying abilities. As far as the technology features of the e-learning platform allow it, Web Content Accessibility Guidelines (WCAG)[8] should be followed. Features such as captions, transcripts, and adaptable formats should be considered.

- **Accessibility of in-person training:** Organisations must ensure that training venues are physically accessible, providing necessary accommodations such as wheelchair access and appropriate seating arrangements. Access to quite spaces for neurodivergent participants should also be available. Aspects such as caring responsibilities of some learners should also be considered when planning the event. Finaly, organisers should take dietary requirements of participants into account.

[6] See e. g. Universal Design for Learning Guidelines: https://udlguidelines.cast.org
[7] See e. g. European Institute for Gender Equality (2022). Toolkit on Gender-sensitive Communication.
[8] See e. g. *Web Content Accessibility Guidelines (WCAG) 2.2*. Accessed January 15, 2025. https://www.w3.org/WAI/standards-guidelines

6. Recognition and certification of participation in the program: proposed approach

The following text proposes the overall model for the recognition of completion of the learning outcomes. Details of the model will be further elaborated in the process of training development.

Learners participating in the ECDA training program will have a possibility to choose various learning paths leading to recognition of their learning outcomes. The program will be designed in a way that allows for two different approaches. Learners will be able to:

- Set up their own learning path: open access to all learning units allows learners to choose learning units that fit their learning needs without the necessity to participate in the whole modules.
- Participate in one of the five predefined learning paths represented by five training modules.

Based on the learning path they choose participants can have their learning outcomes recognised in the following ways:

- **Certificate of Attendance / Grey virtual badge** given to learners who participate in individual learning units. Assessment will be automated based on the completions of tasks in the individual course, including the knowledge check such as online quiz.
- **Certificate of completion / Silver virtual badge** given to learners who complete all learning units in one of the five modules or at least 8 learning units across various modules. Assessment will be automated based on the completions of tasks in the individual course (including the knowledge check such as online quiz) in case of on demand training or carried out by the trainer in case of in-person trainings.
- **The full certificate / Gold virtual badge** is awarded to learners who complete at least 80% of learning units and complete required assignments. In these assignments, the students show that they have understood the course content and can verify that they have acquired these respective skills and competences. The full certificate will correspond to the micro credentials certification

All certificates (badges) will be stored in the Skills Hub and can be used to suggest further learning activities for each learner.

Insight: Micro credentials

Micro-credentials[9] certify the learning outcomes of short-term learning experiences, for example a short course or training. They offer a flexible, targeted way to help people develop the knowledge, skills and competences they need for their personal and professional development. To design the training in a way to facilitate the issuing of micro credentials, ten principles must be followed in a design of training. These include [10]:

1. Quality: Micro-credentials are subject to internal and external quality assurance by the system producing them. Quality assurance processes must be fit-for-purpose, be clearly documented, accessible, and meet the needs of learners and stakeholders.
2. Transparency: Micro-credentials are measurable, comparable and understandable with clear information on learning outcomes, workload, content, level, and the learning offer, as relevant.
3. Relevance: Micro-credentials should be designed as distinct, targeted learning achievements, and learning opportunities leading to them are updated as necessary, to meet identified learning needs.
4. Valid assessment: Micro-credential learning outcomes are assessed against transparent standards.
5. Learning Pathways: Micro-credentials are designed to support flexible learning pathways, including the possibility to stack, validate, and recognise micro-credentials from across different systems.
6. Recognition: Recognition has a clear signalling value of learning outcomes and paves the way for a wider offer of such small learning experiences in a comparable way across the EU.
7. Portability: Micro-credentials are owned by the credential-holder (the learner) and may be stored and shared easily by the credential-holder, including through secure digital wallets (e.g., Europass), in line with the General Data Protection Regulation.
8. Learner-centred: Micro-credentials are designed to meet the needs of the target group of learners. Learners are involved in the internal and external quality assurance processes and their feedback is taken into account as part of the continuous improvement of the micro-credential.
9. Authentic: Micro-credentials contain sufficient information to check the identity of the credential-holder (learner), the legal identity of the issuer, and the date and location of issuance of the micro-credential.
10. Information and guidance: Information and advice on micro-credentials should be incorporated in lifelong learning guidance services and should reach the broadest possible learner groups,

[9] European Union (2022). *Official Journal of the European Union, C 243*

[10] European Commission (2022). *Micro-Credentials Brochure.*

7. Evaluation of the training

To ensure the effectiveness and continuous improvement of the ECDA training programme, it is crucial to establish robust evaluation criteria and processes. A detailed evaluation framework will be developed in WP4. The following text outlines different layers of evaluation to be implemented in the project and beyond its duration.

1. **Internal quality evaluation**

All learning units will be subjected to the internal evaluation process. This evaluation will assume the form of a peer-review by partners from the consortium as well as review by representatives of the industry (associated partners). Possible criteria to be included in this stage include:

- **Relevance to DEI Goals**: Does learning unit contribute to the overarching goals of advancing DEI within the semiconductor industry?
- **Benchmarks**: Does training content reflect industry standards and best practices in DEI?
- **Content relevance and quality**: Are training materials current, industry-specific, and inclusive of diverse perspectives?
- **Accessibility of the content**: Is content accessible to learners with varying abilities?

2. Participants feedback

Mechanisms to collect participants feedback will be set up for both on-demand and live training sessions. Possible criteria for this evaluation stage include:

- **Participant engagement**: Are delivery methods effective in maintaining participant interest and involvement?
- **Knowledge and skills acquisition:** Did participants acquire new knowledge, and do they understand the concepts delivered via training?
- **Applicability in the workplace context**: Can participants apply the learnings practically in their roles, particularly in addressing DEI challenges unique to the semiconductor industry?

To allow for collecting participants feedback effectively it is inevitable that all learning units include measurable learning outcomes, detailing the knowledge and competencies participants should gain. A variety of methods can be used to collect participants' feedback including knowledge checks, self-assessments, peer-to-peer feedback, or surveys (for example) to measure learning progress. It is necessary to ensure that all feedback mechanisms are inclusive, accommodating participants with diverse needs (e.g., language options, assistive technologies) and culturally responsive considering cultural differences in learning styles and communication.

3. Long-term impact assessment

To ensure sustained progress and meaningful cultural change within organisations it is also necessary to focus on the long-term impact of DEI training and track changes over time. Setting clear benchmarks

and maintaining consistent follow-up are critical to assessing and sustaining the training's long-term impact. The main areas of impact to be considered for DEI Suite include:

- **Impact in companies:** Did the training influence workplace practices and organisational DEI outcomes over time? Do employees feel that companies have established a more inclusive environment?
- **Extended talent pipeline:** Did the training contribute to bigger and more diverse talent pool?

In addition, relevance of the training content with regard to the evolving development of DEI should also be assessed.

8. Conclusion and next steps

The DEI Training Suite for the semiconductor industry represents a significant step forward in fostering diversity, equity, and inclusion within the sector. Through the comprehensive training modules, the programme aims to address key challenges and opportunities by equipping professionals across different roles with the necessary knowledge, skills, and strategies to build inclusive workplaces and provide better access to opportunities in the sector for diverse talents. The collaborative approach taken in developing the training—leveraging insights from internal assessments, industry research, and stakeholder engagements—ensures that the content is relevant, practical, and tailored to the unique needs of the semiconductor industry.

With a focus on accessibility and sustainability, the training programme offers a flexible learning structure based on the on-demand online content while still providing opportunities for live interaction. This flexible approach not only accommodates diverse learning needs and preferences but also enhances the programme's reach and impact.

The DEI Suite Syllabus is intended to be a dynamic, evolving document. Building on the framework outlined in this syllabus, five working groups, each comprising representatives from project partner institutions, collaborate to develop the content for each learning unit. As the learning units are developed and implemented, they will provide a foundation for ongoing updates and refinement of the syllabus.

Ultimately, the success of the DEI Training Suite will be determined by its adoption and application across semiconductor companies and educational institutions. By fostering a culture of inclusion, the programme has the potential to attract diverse talent, enhance collaboration between academia and industry, and position the sector as a leader in addressing global challenges through inclusive practices. The commitment of all stakeholders will be crucial in realizing these ambitious goals and ensuring a lasting impact on the industry.

EUROPEAN CHIPS DIVERSITY ALLIANCE

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Annex 1: Detailed description of learning units included in the training module

Fill in for each training course/activity included in the training module.

<table>
<tr><td>Title of the learning unit:</td><td></td></tr>
<tr><td>Short annotation</td><td>Provide a brief annotation (150 words) of the course. Annotation should inform about course objective, learning outcomes and topics covered.</td></tr>
<tr><td>Learning objective</td><td>Define the main objective of the learning unit</td></tr>
<tr><td>Target group (s)</td><td>Indicate the main target group and level of their knowledge.</td></tr>
<tr><td>Number of learning hours:</td><td>Indicate what is the minimum required time (in training hours. 1 training hour = 60 minutes) to deliver the outcomes foreseen in the training activity.</td></tr>
<tr><td>Expected learning outcomes:</td><td>After taking this course/training activity, learner should be able to: ....

Describe in bullet points what is the expected learning outcome in terms of knowledge and skills. Provide examples of task and situations in which participants can use the acquired knowledge and skills.

You can consult existing DEI skills frameworks (Annex 1)</td></tr>
<tr><td>Content of the learning unit</td><td>Describe (in bullet points) what should be the topics covered by the training activity.</td></tr>
<tr><td>Learning unit set-up and methods used</td><td>Outline the suggested format and structure of the course/activity. Describe how could the course/activity be delivered with regard to the methods and approaches used. If relevant/possible you can elaborate this part in the form of scenario/ activity breakdown here:

<table><tr><td>Duration/Timing:</td><td>Activity description:</td></tr><tr><td></td><td></td></tr></table></td></tr>
<tr><td>How are the specifics of semiconductor industry addressed in the learning content:</td><td>Provide examples of how skills and knowledge acquired through this training course/activity can be used across different professional paths in the life sciences or how they can help PhD students to start career in the sector.</td></tr>
<tr><td>Forms of active engagement</td><td>Provide suggestions of how participants can be actively engaged in the training course/activity (e. g. through practical assignments, group work, discussions, digital interaction tools etc.)</td></tr>
<tr><td>Completion requirements</td><td>Describe the conditions the participants have to fulfil to complete the training course/activity successfully.</td></tr>
<tr><td>Assessment of acquired competences</td><td>Describe how could be the learning outcomes of the training course/activity assessed (self-assessment, quiz etc.).</td></tr>
<tr><td>Engagement of industry experts</td><td>Suggest how can the practitioners from the semi-conductor sector and other external experts be involved in the delivery of the course/activity.</td></tr>
<tr><td>Handouts and recommended study materials</td><td>List at least five study resources. Indicate which resources are required for the course/activity completion and which are recommended for further reading and exploring.</td></tr>
<tr><td>Further recommended learning resources</td><td>Include resources related to the course/activity topic (not general resources on training delivery). Examples of such resources include e.g. webinars or online resources available free of charge etc.</td></tr>
<tr><td>Considerations for live training delivery</td><td>Provides suggestions on how to deliver the training in live format.
What methods and activities could be used?
What qualifications and experience a trainer/facilitator delivering the course/activity should have?</td></tr>
</table>

Annex 2: ECDA Glossary[11]

1. ACCESSIBILITY

"Accessibility" refers to the design and provision of products, services, environments, and facilities that everyone can access and use, regardless of their age, ability, or status. It aims to eliminate barriers, ensuring equal access and participation for all individuals, including those with disabilities, limited mobility, or diverse backgrounds. Accessibility encompasses various aspects, including physical, digital, and communication accessibility. Accessibility is a fundamental pillar of diversity, equity, and inclusion initiatives. By embracing accessibility principles, organisations can create inclusive environments that empower individuals from all walks of life.

2. AGEISM

"Ageism" refers to stereotypes (how we think), prejudice (how we feel), and discrimination (how we act) towards others or oneself based on age. The term is generally used to refer to age-based discrimination against older adults.

3. BELONGING

"Belonging" is the subjective feeling of inclusion or acceptance into a group of people. This sense of community or connectedness in a social group is a basic human need that individuals must satisfy to maintain their identity, physical well-being, and mental health. In DEI, belonging means the level of security and comfortability an employee feels at work when they are accepted, included, and supported. Feelings of belonging at work support engagement, high performance, and employee well-being and help teams build cohesion and achieve organisational goals.

4. CULTURAL DIVERSITY

"Cultural diversity" refers to the variety of cultural expressions, practices, and identities within a society or community. It encompasses the different backgrounds, languages, traditions, and beliefs that shape individuals and groups. Recognizing and valuing cultural diversity is essential for promoting inclusion, fostering mutual respect, and enhancing social cohesion. Cultural diversity plays a pivotal role in the context of Diversity, Equity, and Inclusion (DEI). Embracing cultural diversity not only enriches communities but also enhances organisations and institutions.

5. DISABILITY

The term has been used to identify the impairments that result from disease and injury, the physical, mental, or emotional functional limitations or difficulties a person has due to the impairments, and the participation restriction they experience when the environment is not supportive. Thus, disability has been used to represent almost any conceptual component associated with the ability continuum that impacts the person.

6. DISCRIMINATION

[11] Terms related to gender equality are partially based on the *EIGE Thesaurus*

The term refers to the unequal treatment of similar individuals in the same situation who differ by one or several characteristics, such as race, ethnicity, gender, (dis)ability, sexual orientation, or other categorical statuses. Discrimination may result from an explicit reservation or exclusion based on some of these characteristics or be the outcome of seemingly neutral rules or procedures that disproportionally disadvantage specific individuals or groups compared to others. These disadvantages might spur from organisational or societal cultures that favour some groups over others due to historical legacies, laws, or public policies.

7. DIVERSITY

"Diversity" encompasses the range of similarities and differences everyone brings to the workplace, including (but not limited to) language, race, national origin, ethnicity, gender, age, religion, sexual orientation, disability, and socioeconomic status. Diversity acknowledges how people differ, including race, ethnicity, sex, gender, age, and ability, but diversity in the workplace also refers to diversity in how people think.

8. DIVERSITY, EQUITY, AND INCLUSION (DEI)

"Diversity, Equity, And Inclusion" (DEI) describes policies and programmes promoting the representation and participation of different individuals. DEI encompasses people of various ages, races, ethnicities, abilities, disabilities, genders, religions, cultures, and sexual orientations. It also covers people with diverse backgrounds, experiences, skills, and expertise.

9. DIVERSITY, EQUITY, AND INCLUSION (DEI) FATIGUE

The term refers to the mental exhaustion and stress individuals can experience when engaging in diversity, equity, and inclusion initiatives. Instead of feeling supported for their efforts, they are met with pushback at every turn. DEI fatigue typically sets in when an organisation's efforts around diversity are made the responsibility of a committee that is given neither the power nor the resources to effect any real change.

10. EMPLOYEE LIFE CYCLE

The employee life cycle is a model that charts an employee's career progression while with a company. The number of stages in each employee's life cycle can change according to the size of the organisation they worked for and the duration of their employment there. Nonetheless, the life cycles typically follow a similar progression, and understanding these stages can help create a positive and efficient work environment.

11. EQUALITY

The term signifies correspondence between objects, persons, processes, or circumstances with the same qualities in at least one respect but not all respects, i.e., regarding one specific feature, with differences in other features. "Equality" must then be distinguished from "identity", which refers to the same object corresponding to itself in all its features. For the same reason, equality must be distinguished from "similarity" – the concept of merely approximate correspondence. Thus, to say that men are equal, for example, is not to say that they are identical. Equality implies similarity rather than "sameness".

12. EQUITY

“Equity” refers to fair treatment, access, and advancement of each person in an organisation, including fairness in pay, fairness in daily work experiences, and opportunities for advancement. It's important to note the difference between equality and equity. Equity focuses on achieving equal outcomes and helping diverse groups achieve success and a higher quality of life by providing equal access to opportunities.

13. GENDER

The term refers to a set of roles, behavior patterns, activities, and attributes created by society, which the given society considers appropriate for women and men. The cultural and social attitudes shape "feminine" and "masculine" behaviours, products, technologies, environments, and knowledge. "Gender" denotes multidimensional and changing understandings of what it means to be a man or a woman within particular social settings.

14. GENDER IDENTITY

Each person’s deeply felt internal and individual experience of gender, experiencing themselves as male, female, a blend of both, or neither. Gender identity may or may not correspond to the sex assigned at birth. Closely related to gender identity is the term „gender expression“, which refers to the external presentation of one's gender identity through behaviors, clothing, hairstyle, voice, body language, and other forms of self-expression.

15. GENDER BIAS

“Gender bias” refers to an often unintentional and implicit differentiation between men and women. It reflects traditional images of masculinity and femininity and creates a hierarchy between genders, which influences both participation of men and women in various areas of life. An example of gender bias in research is research that focuses on the experience and point of view of either men or women while presenting the results as universally valid.

16. GENDER MAINSTREAMING

A globally accepted strategy for promoting gender equality involves ensuring that gender perspectives and attention to the goal of gender equality are central to all activities—policy development, research, advocacy/dialogue, legislation, resource allocation, and planning, implementation, and monitoring of programmes and projects.

17. HOMOPHOBIA

“Homophobia” encompasses a range of negative attitudes and feelings toward homosexuality or people who identify or are perceived as being lesbian, gay, or bisexual. It has been defined as contempt, prejudice, aversion, hatred, or antipathy, may be based on irrational fear, and may sometimes be attributed to religious beliefs. Homophobia is observable in critical and hostile behaviour, such as discrimination and violence, based on non-heterosexual sexual orientations.

18. INCLUSION

“Inclusion” is a policy of providing equal access to opportunities and resources for people who might otherwise be excluded or marginalized. It is about creating an environment where all team members, regardless of their differences, can thrive and fully participate.

19. INTERSECTIONALITY

“Intersectionality” is an analytical framework for understanding how groups' and individuals' social and political identities result in unique combinations of discrimination and privilege. These factors include gender, caste, sex, race, ethnicity, class, sexuality, religion, disability, height, physical appearance, age, and weight. These intersecting and overlapping social identities may be both empowering and oppressing.

20. NEURODIVERGENT

"Neurodivergent" describes people whose brains function and process information differently. It is a non-medical umbrella term that refers to the diversity in mental functioning within the human population.

21. NEURODIVERSITY

The neurodiversity paradigm is a framework for understanding human brain function that considers the diversity within sensory processing, motor abilities, social comfort, cognition, and focus as neurobiological differences. It argues that diversity in neurocognition is part of humanity and that some neurodivergences generally classified as disorders, such as autism, are differences with strengths and weaknesses as well as disabilities that are not necessarily pathological.

22. NEUROTYPICAL

“Neurotypical” is a descriptor that refers to someone with brain functions, behaviours, and processing considered standard or typical. A neurotypical person has neurocognitive functions (ability to think and reason) that fall within societal norms and expectations. This stands in contrast to the term "neurodivergent," commonly applied to people with autism whose neurocognitive functions diverge from society's norms and expectations.

23. SEX

"Sex" is a biological quality or classification of sexually reproducing organisms, generally female, male, and/or intersex, according to functions that derive from the chromosomal complement, reproductive organs, specific hormones, or environmental factors that affect the expression of phenotypic traits that are strongly associated with females or males within a given species.

24. UNCONSCIOUS BIAS

“Unconscious bias” (or “implicit bias”) describes a subconscious attitude that affects the way individuals feel and think about others around them. Subconscious attitudes aren't necessarily as well-formed as coherent thoughts, but they can be very ingrained and impact individuals' emotional and rational responses in everyday situations. Unconscious biases are social stereotypes about certain groups of people that individuals form outside their conscious awareness. They can lead to problems ranging from microaggressions in the workplace to unintended harassment or racism.

Annex 3: Competence frameworks for DEI skills

Competencies refer to the combination of knowledge, skills, abilities, and behaviours that enable an individual to perform a job effectively. They encompass both hard skills (technical abilities specific to a role) and soft skills (interpersonal and behavioural traits). There are several competence frameworks that might help to identify skills relevant for DEI.

The key reference competence framework for ECDA project is ESCO (European Skills, Competences, Qualifications and Occupations).[12] ESCO works as dictionary, describing, identifying and classifying professional occupations and skills relevant for the EU labour market and education and training. The ESCO framework does not specifically mention Diversity, Equity, and Inclusion (DEI) skills as a distinct category. However, it includes broader transversal skills and competencies that are relevant to DEI, such as cultural awareness, interpersonal skills, and communication skills. It also specifies some of DEI skills such as:

- Apply socially just working principles
- Support cultural diversity
- respect the diversity of cultural values and norms:
- promote inclusion
- Set inclusion policies:
- Ensure Gender Equality in the Workplace

ESCO also includes description of the role of Equality and inclusion manager as an occupational role.

The more detailed and DEI focused frameworks are developed by equality bodies or for the needs of the specific organisations. Examples of these frameworks include:

Canadian Centre for Diversity and Inclusion (CCDI) Competency Framework[13] includes competencies for making the case for DEI, building strategies, and implementing initiatives. It covers areas like communication, HR practices, and training development to ensure comprehensive support for DEI efforts within organisations.

Diversity Works NZ Competency Framework[14] outlines core technical and personal competencies for workplace inclusion advisors. It includes categories such as self-awareness, which encourages continuous learning about one's cultural influences, and subject matter expertise, which focuses on applying DEI best practices in specific industries.

D&I Competency model (2008)[15] developed by Conference Board through collaborative discussions among D&I experts includes seven categories of skills: change management, diversity and inclusion global perspective, business acumen, strategic external relations, integrity, visionary & strategic

[12] See European Commission (n.d.). *European Skills, Competences, Qualifications and Occupations (ESCO)*

[13] See Canadian Centre for Diversity and Inclusion (2024). *CCIP Competency Framework*.

[14] See Diversity Works New Zealand (n.d.). *Competency Framework*

[15] See The Conference Board (2008). *Creating a Competency Model for Diversity and Inclusion Practitioners*

leadership, and hr competencies. Each category comprises specific competencies with behaviourally based definitions aimed at enhancing the effectiveness of D&I practitioners.

Another Study by Kim and Roberson[16] discusses the skills needed for effectively managing and addressing implicit bias within workplace interactions, focusing on three key roles: agents, bystanders, and targets. Skills for (1) agents (those expressing implicit bias) focus on responding to confrontation and acknowledging bias, skills for (2) bystanders (those witnessing implicit bias) focus on identifying subtle bias, taking responsibility and deciding how to confront and skills for (3) targets (those directly affected by bias) focus on responding to bias, handling emotional reactions and maintaining relationships.

[16] Kim, J. Y., & Roberson, L. (2022). I'm biased and so are you. What should organizations do? A review of organizational implicit-bias training programs

EUROPEAN CHIPS DIVERSITY ALLIANCE

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Annex 4 List of participating organisations at the review meeting

A virtual meeting to review this deliverable was held on January 29, 2025, with ECDA work package leaders, Diversity in Chips Leadership Board members, and representatives from associated partner organizations in attendance. The meeting had a total of 31 participants.