





D2.4 Summary of Study Visits

"Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Innovation Council and SMES Executive Agency (EISMEA). Neither the European Union nor the granting authority can be held responsible for them."

Deliverable Summary

Deliverable:
D2.4 Summary of Study Visits
Due date:
30/11/2023
Actual submission date:
02/12/2023
02/12/2025
Project start date:
01/12/2022
01/12/2022
Duration:
24 Months (till 30 th November 2024)
Work Package concerned:
WP2
Work package leader:
Western Development Commission
Dissemination level:
PUBLIC (PU)
Authors:
Helena Deane
Revision history:
15/11/2023 First Draft
02/12/2023 Final Version

Project Summary

SPECTRA project (Stimulating Performance of Ecosystems in Creative Territories and Regional Actors) embodies the collaborative vision of 8 partners (including 3 associate partners) representing 4 regional ecosystems – an emerging innovator region in Bulgaria (North-Central-BG), moderate innovator region in Ireland (Northern and Western), together with lead innovator regions in Denmark (Hovedstaden) and Germany (Berlin).

SPECTRA will put in place key ingredients required to equip the emerging innovator and moderate innovator regions with a more responsive, resilient ecosystem, capable of growing and developing coordinated responses to many challenges creative industries are facing to achieve the National and European goals. It will harness and multiply the power of individual ecosystem initiatives to create a collaboration driven innovation network - resulting in enhanced, more inter-connected, diverse, gender-responsive, competitive, and sustainable ecosystems.

Additionally, SPECTRA will include activities directed at the creative innovation eco-system stakeholders that will encourage development of joint strategies and amplify collaboration. They will benefit extensively from the advanced business support models developed to fast-track start-ups, produce scale-ups, avail of best practice, new systems, structures, and tools, as well as data-driven & carbon-reducing challenge-based innovation methods, case studies, role models, cross-sectoral and intra-territorial learning - creating an excess of 300 new linkages.

In addition to addressing the relevant project call and work programme contexts, the National, Regional and EU Policy framework and its associated strategies and objectives, the overall concept for SPECTRA has been conceived around formulating coordination and support measures based on the preliminary needs analysis of the 3 key primary audiences: ecosystems as a whole (as catalysts for businesses to thrive and drivers of innovation), SMEs, start-ups and scale-ups (entrepreneurs/solution providers and key beneficiaries), and other ecosystem stakeholders (public organisations, HEIs, researchers, clusters, incubators, accelerators, etc.).

All 3 audiences are perceived beneficiaries of the SPECTRA outcomes, with the proposed project removing obstacles to achieving expected impacts (further elaborated on below, including other target audiences).

SPECTRA is funded through EISMEA.I – Innovation Ecosystems, SMP/Entrepreneurship and Consumers strand, EU and place-based Innovation Ecosystems Call HORIZON-EIE-2022-CONNECT-01-01: Towards more inclusive networks and initiatives in European innovation ecosystems, under Horizon Europe Lump Sum GRANT AGREEMENT No. 101097000.

Contents

DELIV	/ERABLE SUMMARY	2
PROJE	CT SUMMARY	3
CONTE	ENTS	4
1 DE	ELIVERABLE DESCRIPTION	5
	ITRODUCTION	
2.1	Successful Initiatives from Leader Innovator Regions	7
2.2	PARTNERS FROM EMERGING AND MODERATE INNOVATOR REGIONS	9
3 ST	TUDY VISIT IRELAND	11
4 ST	TUDY VISIT DENMARK	17
4.1	EKIP PROJECT DEMO-POLICY-LAB	17
4.2	VISIT TO COPENHILL	
4.3	CREATIVE BUSINESS CUP FINALS 2023	
4.4	COPENHAGEN ECOSYSTEM INITIATIVES	24
5 ST	TUDY VISIT BULGARIA	28
6 ST	TIIDV VISIT GERMANV	36

1 Deliverable Description

One of the primary objectives of the SPECTRA project is to enable, through its activities, systemic transfer of knowledge, experience, and expertise from lead innovators to moderate and emerging innovator regions, on a cross-border, cross-disciplinary basis, addressing the following challenges:

- Lack of active drivers bringing stakeholders together despite numerous agents and supports available to support collaboration and networking, full breadth of the ecosystem is not being fully exploited either at the local level or beyond and opportunities exist to increase the relevance of, and connections to, other innovation partners.
- Divergence in ecosystem maturity, policy environment and inter-connectivity.
- Asymmetry of knowledge, experience, and expertise among the ecosystems.

The SPECTRA interventions under Work Package 2 (WP2) 'Capacity Building of Moderate and Emerging Innovator Territories' target the emerging and modest ecosystems directly, with the aim to engage more with emerging innovation directions and trends, and advanced methods, tools, systems, and structures, enable them to become more resilient to disruption, such as caused by the COVID19 pandemic, to develop capability to turn them into opportunities and develop new solutions to the challenges they face in their environment, as well as to:

- ensure socio-environmental issues are addressed at a very early stage in activities and are an essential cornerstone of strategy for growth.
- become more proactive and skilled in driving innovation, becoming the instigator of new technological solutions ('bottom-up' approach).
- engage more in multi-stakeholder discovery process and co-creation.
- become more connected to other ecosystems and other stakeholders in the ecosystem, to expand sharing of knowledge and expertise.

These activities provide for strategies to overcome barriers in addressing these challenges and opportunities, including:

- Lack of knowledge on how to effectively engage with emerging innovation directions and trends – which trends and technologies are most relevant, in what way and for what purpose – having weak association/appreciation of how they need to integrate with the complex requirements of the ecosystem and the entrepreneurs.
- Weak mechanisms and processes via which businesses can engage in collaboration and innovation with external partners and other ecosystems.
- Fragmented eco-system, especially on the cross-border/transnational basis, when considering key players, weak open innovation frameworks engaging the quadruple helix
- Perception that some existing solutions are 'solutions looking for a problem' rather than solving a genuine need/challenge & common challenges exist without appropriate solutions being available.
- low level of connectivity and 'intra-operability' between ecosystems.

SPECTRA also recognises that intentional ecosystem-strengthening initiatives still represent an exploratory space with regard to evidence base on what does and what doesn't work. Providing more space for ecosystem actors to lead the design, implementation and evaluation of these interventions will help to clarify some of the critical success factors. Hypotheses and assumptions will be tested in this SPECTRA approach, before good practices can be confidently defined, and further collaborate to understand where and how different actors are contributing to systems strengthening.

This deliverable is linked to the task T_{2.4} Accelerated Ecosystems: Inter-Territorial cross-learning.

An important aspect of SPECTRA is to facilitate learning and knowledge transfer from more mature, stronger innovation regions (Denmark and Germany) to those that are moderate and emerging innovator regions (West of Ireland and Bulgaria).

To facilitate this process of learning and exchange, 4 study visits have been undertaken, where partners had the opportunity to visit each other's ecosystems. Study visits are a very effective tool for establishing inter-territorial cooperation schemes and networks, for raising awareness of initiatives that work well and for learning about examples of good practice in other countries.

The 4 study visits took place as follows:

- West of Ireland, Galway January 2023 (Hosts: Western Development Commission, CREW and AP Galway Culture Company, AP Atlantic Technological University)
- Copenhagen, Denmark June 2023 (Hosts: Creative Business Network)
- Ruse, Bulgaria July 2023 (Hosts: BIC Innobridge and AP Chamber of Commerce Ruse)
- Berlin, Germany November 2023 (Hosts: Media Deals).

The outcomes of these study visits have been documented herewith and will be disseminated within the respective ecosystems and beyond, to facilitate adaptation and replication of lessons learned, thereby accelerating the development of the ecosystems, which will be enriched with new ideas for interventions and linkages.

2 Introduction

The SPECTRA consortium combines world-class expertise in ecosystem orchestration, acceleration and scaling of start-ups, access to finance and business support service provision of the partners with advanced methods of network-building and development of systemic innovation embedded eco-systems. It consists of 8 partners (5 beneficiaries and 3 associate partners); covering an emerging innovator region in Bulgaria (North-Central-BG), moderate innovator region in Ireland (Northern and Western region), together with lead innovator regions in Denmark (Hovedstaden) and Germany (Berlin).

One of the main objectives of SPECTRA is to enable learning of moderate and emerging innovator regions from leading innovator ecosystems.

2.1 Successful Initiatives from Leader Innovator Regions

Media Deals (Berlin – Germany) is a pan-European investor network created in 2008 and being constituted of business angels and early-stage venture capital funds focusing on cross border investment and financing of the creative industries and digital media. It is headquartered in

Berlin, which is described as a Pioneer in Creative Industry and Open Ecosystems in the Committee of the













Regions (CoR) Guide to Regional Innovation Ecosystems. With around 40,000 business registrations per year and more than 500 startup companies per year, Berlin is undisputedly Germany's founder capital and is expanding its nationwide lead.

Numerous national and international studies have identified Berlin as a leading global location for start-ups with extremely high growth potential. In 2021, a record 431 deals were closed in Berlin, with a value of 10.48 billion Euro¹. International market leaders such as Google, Cisco and Telekom choose Berlin as the location for their centres of innovation and their incubators.

Berlin thrives though innovative subcultures. With 100 co-working spaces and counting, Berlin has the world's third highest number of co-working spaces per capita. An open economy is a reality. Berlin has the highest economic growth in Germany. Over the past 4 years alone, Media Deals' more than 100 active regular investor members participated in 457 creative company presentations (online and offline) that were attended by 391 public and private financiers. Media Deals is a member of EBAN, EBN and NEM, always recruiting new potential investors to connect them with start-ups through Investment Conferences, with membership to the European Business Angels Network and through Creative Europe supported Training programme for investors called ENTER Europe.

Media Deals work with international investor online-platforms such as EuroQuity and Gust; provides training to investors to help them better understand how value creation, exploitations chains and financing models work in creative industries they are not yet acquainted with, as well

¹ https://www.businesslocationcenter.de/fileadmin/user_upload/Infothek/files/EY_Startup-Barometer-2022.pdf

as engaging investors to actively share sector expertise and investment experiences.

SPECTRA is looking to take advantage of this state-of-the-art creative ecosystem and leverage it to improve participation of financiers/investors in the emerging and moderate innovation region in Bulgaria and West of Ireland and create new opportunities for start-ups/scale-ups in the process.

<u>Creative Business Network</u> (Copenhagen, Denmark) has the objective to support creative entrepreneurs through access to networks, investors and support organisations at national,

European and international level, giving them and the network the needed visibility to create the right environment for a



sustainable development. It connects innovators and creative players from all over the world – it is a community of more than 3000 start-ups, institutions, industry experts and policy makers from more than 80 countries.

CBN champions the cultural and economic impact of creative industries with access to significant volume of reach, audience and data. The partnership can benefit from CBN's experience in building and supporting trans-national networks. Their goal is to facilitate a mutually beneficial environment where the local, regional, and national economies can benefit from the creative industries. This includes innovators, individual businesses or groups of businesses.

CBN are at the forefront in terms of competence and expertise in this field, based on international and regional work spanning more than 10 years. CBN have accumulated an indepth knowledge and understanding of the relevant regulatory environment in different countries, particularly in Europe. They are members of the European Creative Business Alliance (ECIA) and work closely with many of its members.

At the invitation of The European Commission, they co-chaired the expert group with representatives from all member states and external experts on access to funding. The group produced 10 key policy recommendations addressed to the EU Member States and the EU Institutions. These recommendations serve as a basis for decision-makers to adopt an ambitious European or national agenda to support the cultural and creative industries.

CBN runs a range of innovative interventions, including play & learn, the creative academy, this is CBN science and innovation challenges and is a key partner of <u>sustainary</u>, a global platform for sustainable collaboration rooted in technological advancements and invio – the experience economy cluster and an innovation network for experience-based innovation and business development.

CBN is HQ-ed in Copenhagen, Copenhagen which is ranking third on 'Cultural Vibrancy' and 'Enabling Environment' and fourth on 'Creative Economy' on the index of Cultural and Creative Cities in Europe. On 'Creative Economy', Copenhagen is first on Jobs in arts, culture & entertainment, third on Jobs in media & communication and second on Community design applications. Under 'Enabling Environment', it ranks first on People trust. Greater Copenhagen ranks top in terms of university-industry cooperation and offers Scandinavia's most knowledge-intensive research and business environment.

2.2 Partners from Emerging and Moderate Innovator Regions

Innobridge and Ruse Chamber of Commerce are both active actors in the North-Central region of Bulgaria. Innobridge Business Innovation Center supports innovative start-up businesses at local, regional and national level. The working principle of BIC INOBRIDGE follows the methodology and collective experience, applying the know-how of the European Business Innovation Centres Network (EBN). Currently, this is the first and only officially accredited EU BIC centre for Bulgaria. The organization itself has its origins as a successfully implemented European project, thanks to the availability of a wealth of experience, knowledge and skills, numerous best practices, and a strong team. Innobridge provides innovation and business support activities such as: training, seminars, consulting and tailored supports, especially with focus on creative industries and needs of young entrepreneurs and start-ups. It has a team of 11 specialists and has collaborated in 16 EU projects with 58 partners.

The <u>Ruse Chamber of Commerce</u> (AP) – the oldest chamber in Bulgaria, has extensive knowledge and experience in local and regional development, SME development, export and investment promotion. It promotes and supports local business in providing a comprehensive range of business and trade related services, including representing individual and collective interests of its members. The principal activities of RCCI are the promotion of the economic development of the Ruse region; lobbying at local and central government and other public authorities to promote an understanding of the role and needs of business and providing a wide range of services to member and non-member companies to help them develop their business, both at national and international level.

Given the pioneering nature of both organization and focus on creative industries, they represent strong agents for change and development of the regional ecosystem. New Technologies in the creative and recreational industries are a RIS3 thematic priority and the particular challenges² faced by the ecosystem, are weak policy intervention, weak investment climate and limited access to finance, under-representation of women innovators and weak protection of creative IP³ with the JRC point review highlighting the weak connection with international networks and value chains and particularly European partnerships and competitive funding.

It has been well documented⁴ that the **Northern & Western region in Ireland** has not performed economically as well as its fellow regions in Ireland and relative to the EU norm. As a result of the region's poor economic performance, EC has downgraded the region to a "Transition Region" post 2020. An investment analysis found that Higher Education Institutes within the region received less in capital funding per undergraduate enrolled relative to its fellow regions and the State average. Likewise, government R&D funding provided to the region – per head of population – was lower relative to the national norm, along with relative under-investment in infrastructure. In addition to this reclassification, the European Parliament's Committee on Regional Development has also categorised the region as a "Lagging Region", which is a region that faces specific development challenges, including relatively lower productivity and educational attainment, a weaker skills base and business environment. The region is on periphery of Ireland and Europe and would benefit from an

 $^{{}^2\} https://publications.jrc.ec.europa.eu/repository/bitstream/JRC123901/jrc123901_point_bulgaria_final_with_indicators.pdf$

³ https://www.saa-authors.eu/en/news/761-alliance-for-the-development-of-creative-forces-in-bulgaria#.YmckptrMKUk

⁴ https://www.nwra.ie/news/region-in-transition-the-way-forward

enhanced network and connectivity with other ecosystems and territories, from increased participation of women innovators and financiers, as well as reduced ecosystem fragmentation.

The <u>Western Development Commission</u> is a statutory body to promote social and economic development in the Western Region. It advises the government on regional issues and promotes government policy directed at improving social and economic standards here. It manages the WDC Investment Fund, which provides loans and equity to businesses and local communities in the region. WDC strategy is built on three pillars: regional promotion; regional leadership; and sustainable enterprise. Its initiatives had success in creating new national policy frameworks, leveraging private and public investment and enlisting communities. For over a decade the WDC has led the region in the development of its creative economy and facilitates and collaborates with stakeholders on projects, supports and initiatives that underpin the sector.

In response to the needs of the creative industries and the ecosystem, the CREW initiative was established in 2021. CREW "Creative Enterprise West" is a collaborative incubator and acceleration initiative that supports enterprises in areas such as design, film and TV production, animation, gaming, content development and AR/VR from its base in Galway city, with the aim to increase enterprise and job growth in the West of Ireland contributing to sustainable regional economic and social development. It will manage Ireland's first Innovation Hub and Business Incubator focused on accelerating the development of innovative entrepreneurs in the Creative Industries including film, tv, gaming, animation, immersive, virtual production, and creative technologies.

The associate partner Atlantic Technological University is a regional HEI and research organization with the <u>Centre for the Creative Arts & Media</u> (CCAM), home to a number of Creative Industries organisations and enterprises alongside the courses in Design (Graphic Design & Illustration, Animation & Game Design, Industrial design and Fashion & Textile Design), Contemporary Art (2D Painting-Printmaking-Photography, and 3D Ceramics-Sculpture-Digital Media), and Film & Documentary (Editing, Screenwriting, Production design, VFX Visual Effects, Audio Production and Cinematography, Production & Direction).

The <u>Galway Culture Development Company</u> is a legacy organization from the Galway Capital of Culture project, which now focuses on delivering support to cultural and creative industries with focus on partnerships, programme, place, people and participation. Together these 3 partners represent 3 different aspects of the regional ecosystem and will ensure participation of policy makers, enterprise facing actors, NGOs and communities, as well as outreach to other innovation actors.

The Role of Associated Partners

The 3 Associated Partners (Atlantic Technological University (IE), Ruse Chamber of Commerce (BG) and Galway Cultural Development Company (IE)) are participating in the project without a budget. Their main role is to bring their diverse perspectives at key junctures of the project, participate in learning activities and, when necessary, provide specific expertise. Most vital of all they will be strong advocates for the coordination and support measures of the project, helping strengthen communication and dissemination actions of SPECTRA and thus replication and impact, while also acting as trusted intermediaries for signposting and referral of companies and other stakeholders to the project activities.

3 Study Visit Ireland

The SPECTRA study visit to Ireland took place on 10th and 11th January 2023, and was hosted by the Western Development Commission (Helena Deane, Jessica Fuller, Alan Hernon and Ian Brannigan), together with project partners CREW (Niamh Costello and Ainslie Peters), and associated partners Galway Culture Company (Marilyn Gaughan-Reddan) and Atlantic Technology University (Paddy Tobbin).

On the first day the partners had the opportunity to meet at the Portershed a Dó. The PorterShed, and innovation and enterprise space, are dedicated to creating high-value sustainable jobs that have a positive impact on Galway and the region. Helping to create tech jobs, especially indigenous tech, is a key part of our goal – and they also support multinational companies by providing office spaces as soft landing bases. The PorterShed is a member of an interconnected community of tech hubs around the island of Ireland whose collective goal is to catalyse innovation in their regions. They are also a regional delivery partner for the NDRC, the national startup accelerator programme for globally ambitious tech entrepreneurs in Ireland.

This visit was of particular interest to BIC Innobridge, who are themselves setting up a range of supports to benefit startups in Ruse, Bulgaria, and they partook in a tour of the facilities.

Presentations were gives by partners and invited stakeholder quests:

- Ian Brannigan of the Western Development Commission, presented on the WDC EU projects portfolio and past initiatives that have supported the development of CCSI in the region.
- Jessica Fuller of the Western Development Commission presented on the Atlantic Innovation Region and the drive to develop this region as a CreatTech region, facilitated by clusters and supported by hubs and other industry specific infrastructure.
- Niam Costello of CREW spoke about the initiatives they were developing, along with the development of a Hub (under construction) to support creative technologists and entrepreneurs in this space.
- Paddy Tobbin of the Atlantic Technological University spoke about the work of the School of Design & Creative Arts and the Departments: Creative Arts & Media, Furniture Design & Technology and Creative Education. He also spoke about the Atlantic Region of Creative Content that brings together the expertise and strengths of the partner organisations to support the development of an all-Island Creative Industries Cluster.
- Marilyn Gaughan-Reddan presented on the work of the Galway Culture Company, which was established to create opportunities to engage with EU and International partners and local place-based programming which honours the relationships and builds on the learnings and outcomes of Galway's many European and Global designations including: UNESCO City of Film, European Green Leaf, European Region of Gastronomy and European Capital of Culture.
- Helena Deane presented on the work of the West Regional Enterprise Plan to 2024. he department's Regional Enterprise Plans are developed by regional stakeholders and focus on undertaking collaborative initiatives that can help deliver enterprise growth in each of the nine regions across Ireland. They are an important part of the Programme for Government commitment to achieving more balanced regional enterprise development. These 'bottom-up' Regional Enterprise Plans complement and build on core strategies of

the enterprise agencies, the Local Enterprise Offices and the wider range of State bodies directly involved in supporting enterprise development in the regions. They aim to bring added value and increased impact through regional and local actors working collaboratively on vulnerabilities and new enterprise development opportunities across the country. The plan includes an objective to 'Strengthen and harness the cultural and creative sector to attract new investment, commercialisation and collaboration opportunities'. This objective includes scaling of existing regional initiatives like CREW, to act as hub and spoke across the region, developing creative centres of excellence such as An Bealach, in Roscommon, developing clustering of the creative and cultural sector to capitalise on emerging development in immersive technology and animation, collaboration between the industry, academia and researchers, and supporting commercial exploitation of creative/cultural IP.

This was followed up by a networking lunch, which provided opportunities for the partners to connect with other local stakeholders including the Board members of CREW and CEO of the Galway Chamber of Commerce.

The next stage of the study activities included a visit to the <u>Pálás Cinema</u>. Pálás is a three-screen arthouse cinema and cultural space in the UNESCO city of film- Galway. Designed by Architect Tom de Paor, Pálás is a concrete monolith, five storeys over double-height basement housing a three-screen independent cinema, al bar and terrace. It occupies the garden of a reinstated 1820s merchant house. It also contains 22 beautiful resin-coated windows designed by Irish artist Patrick Scott. Operated by Element Pictures, the innovators behind Light House Cinema in Dublin, Pálás is an intriguing architectural space for customers to explore, right in the heart of Galway's Latin Quarter. Pálás operates an Event Cinema programme that delivers a colourful variety of opera, ballet, theatre, art, and music from the most exciting artistic voices from around the world. The visit was hosted by William Fitzgerald, an experienced festival producer and programmer with a demonstrated history of working in film programming and marketing, skilled in Film and Documentary, Creative Writing, Film Marketing, Television, and Film Development.

This was then followed by a visit to the Galway Chamber of Commerce premises, where the SPECTRA partners met with Kenny Deery - CEO of Chamber, Kate Howard - City Arts Officer, Caroline McDonagh - Local Enterprise Office and Liz Quinn - Galway Film Festival. The stakeholders gave a detailed overview of their respective activities, highlighting a number of initiatives, EU Projects and policy interventions supporting the CCSI.

Galway Film Fleadh is a week-long international film festival taking place every July in Galway, Ireland. Founded in 1989 as a platform for Irish filmmakers to exhibit their work to their peers, the central goal of the Galway Film Fleadh remains unchanged: to be a platform for the boldest new films, and to bring audiences & filmmakers from around the world together, to celebrate a shared passion for film. In 1997, the Fleadh hosted the inaugural edition of the Galway Film Fair, the UK and Ireland's first dedicated film market. Running alongside the festival each year, the Film Fair has also expanded to include a range of industry-led events including our annual Pitching Competition, masterclasses, case studies, and our annual industry-wide conference, the Fleadh Forum. As a festival of discovery, the Galway Film Fleadh takes care to nurture the next generation of filmmaking talent through our young audiences' festival, Generation Fleadh. Each winter, Generation Fleadh runs screenings & events for young audiences and filmmakers, as well as acting as Irish host to the European Film Academy's Young Audience Award each spring.

Figure 1: Visit to Portershed, Presentations from Atlantic Technological University, Western Development Commission, CREW, Galway Culture Company and the West Regional Enterprise Plan.









Figure 2: Visit to Pálás Arts Cinema, Galway



Figure 3: Visit to Galway Chamber, Presentations on Galway Festival of Culture, Film Fleadh, Galway City Arts Office and Local Enterprise Office

















The first day of the study visit was then concluded with a networking dinner, including some of the regional stakeholders met throughout the day. On the second day of the visit, the partners congregated to have a project progress meeting. Since this was also the first physical meeting since the project commencement on the 1^{st of} December 2022, each partner did a detailed presentation of their respective organization and activities, present and planned. The partners went through the work programme, schedule of deliverables and milestones, while also discussing what content would be of most interest and relevance to the partners to maximise the benefits and impact of the respective visits. Communication and dissemination, project reporting and other formalities were also discussed, while reflecting on follow-ups from the study visit, including follow-ups on newly created linkages and several identified opportunities for collaborative projects.

Figure 4: Project Progress Meeting on Day 2, at the Dean, Galway





4 Study Visit Denmark

The Study visit to Copenhagen, Denmark, hosted by the Creative Business Network, was composed of several elements and over several days, including:

- √ 3 June ekip project Demo-Policy-Lab Meeting including SPECTRA partners.
- ✓ 4 June SPECTRA Partners visit Copenhill and Networking dinner at the Reffen Street Food Market.
- ✓ 5 June SPECTRA partners attendance of the Creative Business Cup Global Finals.
- ✓ 6 June SPECTRA Study visit with stakeholder initiatives.

4.1 ekip project Demo-Policy-Lab

As a part of the SPECTRA study visit, the partners had the opportunity to collaborate and network with another Horizon Europe project relevant to the strengthening of ecosystems – ekip -European Cultural and Creative Sectors and Industries Policy Platform. The ekip project held a session on the methodology for the policy lab, hosted by the SPECTRA partner Creative Business Network, which was highly relevant to SPECTRA activities and targeted outcomes.

Figure 1: Agenda of the ekip demo-policy-lab meeting



ekip brings together highly networked and diverse organisations with strong track-record in research, innovation, and policymaking for and with the CCIs. Beneficiaries from 12 countries with different social, cultural, and economic contexts. Leading universities with expertise on research and innovation in culture and creativity. Organisations with online data collection and analysis competences and visualisation skills. Specialised policy consulting companies and advisories will be linking practice, research, and innovation with policy development for the CCSI. Operating with open innovation principles, ekip will establish a partner and network-

driven policy recommendation engine to continuously drive the formulation and adoption of policy development recommendations for Europe's Cultural and Creative Industries. This will result in support and guidance that strengthens the capacity for CCI-actors to engage in and contribute to complex innovation processes.

The interplay between the project's activities will allow the consortium to deliver two objectives:

- building the meta-network amongst ecosystems and
- developing the knowledge-based and participatory policy engine

which will come together in making the third objective – supporting the development for CCI-centered ecosystems – possible.

The engine is designed to in three main phases (i.e., five steps) achieve this:

- Assess needs for future R&I actions List of defined policy areas together with a metanetwork of networks covering all member states and the CCI diversity.
- Mapping of needs CCIs; tech, invest, skill, regulation Investigate prioritised policy areas looking broadly and across sectors, also focusing on recommendations that will (i) increase the CCIs' readiness for green and digital transitions as well as for the rest of the economy and society.
- Identify and propose key actions Formulate policy recommendations, also giving practical guidelines of how to implement and track development in ecosystems.

The theoretical part of the session was put into practice as a part of a group exercise/workshop, which provided an opportunity to exchange, network and engage in discussion.



Figure 2: ekip presentation on methodology of the Policy Lab and Work to Date



Figure 3: ekip Group Workshop



4.2 Visit to Copenhill

On the second day, SPECTRA partners were invited to visit the Copenhill facility. Amager Bakke or Copenhill, is a combined heat and power waste-to-energy plant (new resource handling centre) and recreational facility in Copenhagen Denmark, located prominently within view of the city's downtown.

The facility opened in 2017, and partially replaced the nearby old incineration plant in Amager, which is in the process of being converted from coal to biomass. The two plants play a major role in Copenhagen's ambitions of meeting zero carbon requirements by 2025. The recreational components of the facility (the dry ski run, hiking trail and climbing wall) opened in December 2018, with an attendance estimated at 42-57 thousand visitors annually.

Copenhill was named the World Building of the Year 2021 at the fourteenth annual World Architecture Festival. It is estimated to cost \$670 million and is expected to burn 400,000 tons of municipal solid waste annually. It also houses a sports facility designed by Bjarke Ingels Group with an 85 m (279 ft) tall, sloped roof that doubles as year-round artificial ski slope, hiking slope and climbing wall, manufactured by Walltopia (a Bulgarian company), is the world's tallest climbing wall at 80 meters. The facility is a great example of creativity enabling cross-sectoral innovation. The partners met up with other stakeholders at the facility, to network and discuss topics of common interest.





4.3 Creative Business Cup Finals 2023

The Creative Business Cup (CBC) 2023 Global Finals was a celebration of innovation, creativity, and entrepreneurship from around the globe. This annual event brings together the most exceptional startups, industry experts, investors, and creative minds to showcase their groundbreaking ideas, products, and services. Taking place in Copenhagen, Denmark, the CBC Global Finals is the ultimate platform for creative entrepreneurs to connect, collaborate, and be inspired with many high-profile speakers and exciting pitches.

The rich and diverse programme that SPECTRA had the chance to take part in is outlined below.

Figure 5: Creative Business Cup Programme

Times are CEST	5 JUNE
	Volume, Enghavevej 80. Copenhagen
10.00 - 10.30	Opening Cultural Entrepreneurship in the Land of Monopoly Angunnguaq Larsen, Musician and Film Actor, Chairman at NunaFonden
10.30 - 11.10	Creative Business Cup 2023 Global Semi-finals
11.10 - 11.35	'Fireside chat' on the Nature of Creativity: What Kills It and What Makes It Thrive on a Personal Leve Christian Stadil, CEO/Owner, Thornico
11.35 - 11.45	Music break by MyCello
11.45 - 12.10	Daring to Be Brave: MÁDARA's Experience Throughout the Time Lotte Tisenkopfa-Iltnere, Co-Founder, MÅDARA Cosmetics
12.10 - 13.00	Artificial Intelligence and the Power of Creativity: Driving Brand Growth through Technology Lotte Tisenkopfa-Iltnere, Co-Founder, MÅDARA Cosmetics Michalis Stangos, VP & Partner, L-Stone Capital Jasmina Nikolic, Client Service Director, New Moment Marcus Ögren, Head Of Design, VNTRS Moderator: Luca Morena, Founder & CEO, Nextatlas
13.00 - 13.10	Copenhagen for Green Creatives Jens-Kristian Lütken Copenhagen Employment and Integration Mayor
13.10 - 13.30	Networking Break
13.30 - 14.00	Building a Global Success in Times of Crises Andrey Khusid, CEO & Co-founder, Miro
14.00 - 15.00	Is Going to an Investor Always the Right Approach for My Startup? Tudor Armand Ciuleanu, CEO, Rebeldot Michael Wiatr, investor, General Partner, Antler Andrey Khusid, CEO & Co-founder, Miro Nicolai Jæpelt, Crowdfunding Chef, Coop Crowdfunding Maderator: David Richards, CBN Expert
15.00 - 15.15	Music break by Playtronica Berlin Station

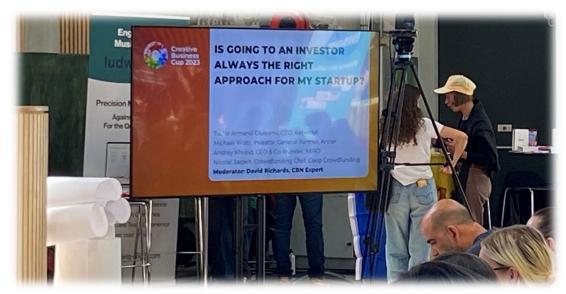


5 JUNE Times are CEST Volume, Enghavevej 80, Copenhagen 15.15 - 15.40 Sexy Black Genius and The Science of Turning **Imagination Into Reality** Tiffany Norwood, Founder & CEO, Tribetan 15.40 - 16.00 Creative Business Cup 2023 Global Finals **Award Ceremony** 16:00 - 16:15 Green Impact Week Summit: Introduction 16:15 - 17:00 Green Impact Week Summit: Transforming Business Models for a Sustainable Future: **Navigating Global Challenges** Sarah Endline, Entrepreneur In Residence, Harvard Business School Safa Sharif, Co-Founder, WSI Consulting Matias Moya, CEO, Photio Olawale Anifowose, Director, Enterprise Development Center Moderator: Anna Petrova, Founder, Startup Ukraine 17:00 - 18:30 CBC Global Finals and Green Impact Week Summit: **Networking Session** Music program by Playtronica Berlin Station Creative market Food court

Figure 6: Creative Cup Finals 2023











The Creative Business Cup 2023 took place in Volume building, a revitalised regenerated industrial space that provided a creative environment for the event and for the SPECTRA partners to connect with attendees, presenters and stakholders.

4.4 Copenhagen Ecosystem Initiatives

The last day of the study visit kicked-off with the visit to Confederation of Danish Industry – Host: Lise Thomsen, Head of DI Creative Industries at the Industriens Hus.

DI is a private business and employers' organisation representing approximately 20,000 companies in Denmark. They aim to provide the best possible corporate conditions for their member companies.

They provide a range of supports including Advisory - legal advice, business services, global trading and more, as well as Events, courses and networks, business delegations, and assist with gaininhg of new knowledge.

Figure 7: Industriens Hus Visit









This was followed by the SPECTRA partners project meeting, to discuss project progress and planning of next steps. Following a networking lunch, the SPECTRA partners visited Copenhagen Capacity – Host: Nikolaj Lubanski, COO. Copemnhagen Capacity are the official organisation for attracting international companies, investors and professional talent to Denmark and the Greater Copenhagen Region.

By facilitating close partnerships across industries, academia, and the public sector for more than 20 years, they are the go-to experts in promoting our region globally, making it an attractive destination for international talents and businesses. Their passion is helping international companies realise their business opportunities and local companies prosper with the world's talented professionals.



Figure 8: Visit with Copenhagen Capacity

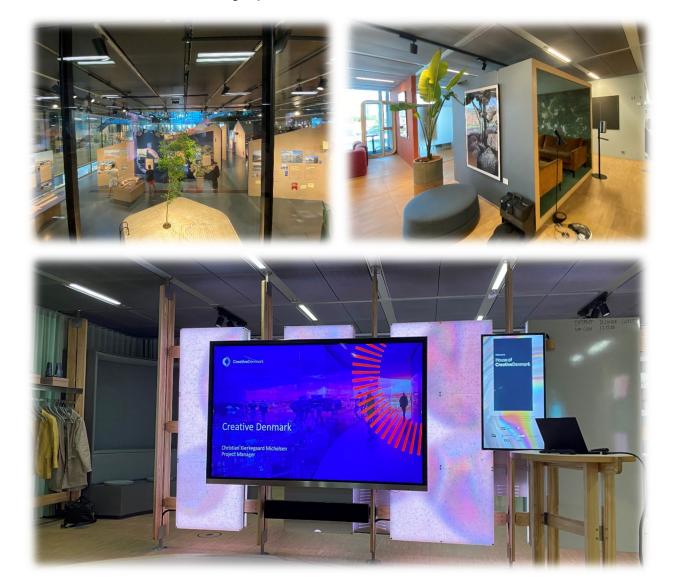
Finally, the study vosit was rounded up with a visit to Creative Denmark – Host: Christian Kierkegaard Michelsen, Project Manager, at the BloxHub and the tour of this innovative and creative facility.

Creative Denmark is a not-for-profit, public-private partnership that creates awareness about Danish creative strongholds internationally and the potential of Danish creativity in solving global challenges.

They work to match international demand for creative innovation and human-centred solutions with the vast competencies in the Danish creative industries. Creative Denmark is funded by a strong group of public and private partners that count the Ministry of Industry, Business and Financial Affairs, the Ministry of Foreign Affairs of Denmark, the Ministry of Culture, the Confederation of Danish Industry, the Danish Chamber of Commerce, and the philanthropic association Realdania.

They are based in the BLOX building located in the heart of Copenhagen. BLOX is a national and international epicenter that engages people in sustainable design, architecture, and urban planning through collaborations, cross-sector learning, partnerships, events, and business development.















5 Study Visit Bulgaria

The study visit to Ruse in Bulgaria was jointly hosted by the SPECTRA partner BIC Innobridge, and the Associate partner, Ruse Chamber of Commerce on 3rd and 4^{th} of July 2023.

The first day of the study visit was kicked off with the SPECTRA project management meeting, where the partners had the opportunity to catch up on the progress of the project, reflect on the recent visit to Copenhagen, and plan future activities, including internal workshops and the upcoming study visit to Berlin.









Following this, the SPECTRA partners met with Tsveta Nenova and Dimitar Lipovanski, founder of Arena Media in Rousse. Arena Media are involved in creation and broadcasting of radio and TV programs, touristic and impresario activity, intellectual property transactions, production of films, video and sound recordings, trade in works of art, exhibition activity, organization and conduct of marketing and sociological studies, creation and sale of scenic musical and artistic works, creation of software and multimedia products, delivery, and distribution of Internet services, as well as data transfer.

The partners heard about their start-up story, had the opportunity to view some examples of their work and projects, and understand the challenges and opportunities within the regional ecosystem they were facing, as well as to learn more about their business models, markets and future ambitions, while reflecting on interventions and supports that they would view as added value.



Figure 11: Arena Media, Ruse

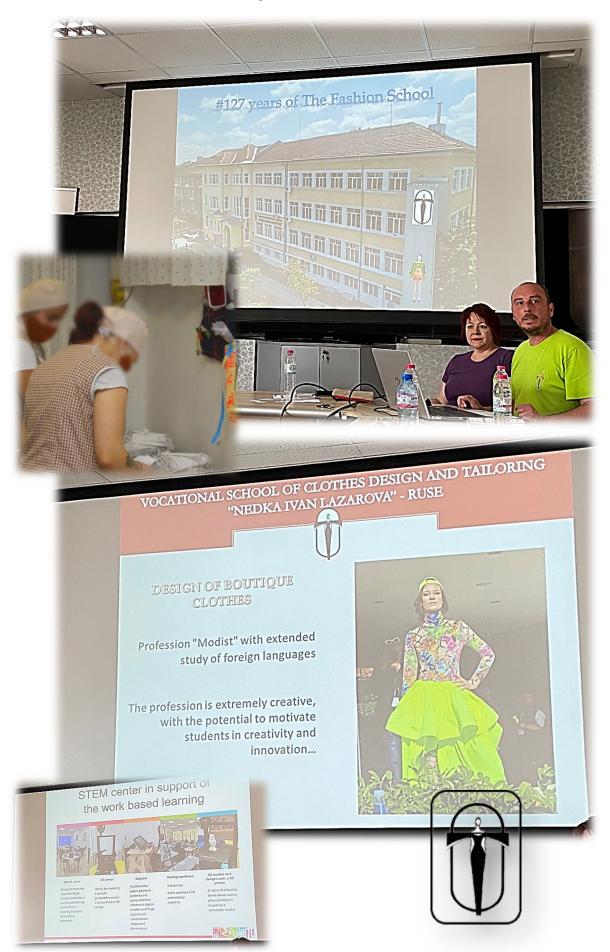
The interaction with Arena Media was followed by a presentation by the Ruse Fashion School Nedka Ivan Lazarova.

This vocational school has great involvement in supporting a sustainable transition in fashion, including, among other initatives, involvement in a circular economy exchange and promoting manufacturing from textile technologies.

It partners with companies in Ruse and educates around 340 students between 14-19 years old. It advocates for a green approach to vocational training in textiles, participating for example in Erasmus+ projects such as IGFashion. They highlighted that storytelling and role models are really important, while highlioghting the vast potential for innovation.

Their STEM Centre for technologies in creative industries involves 15+ companies.

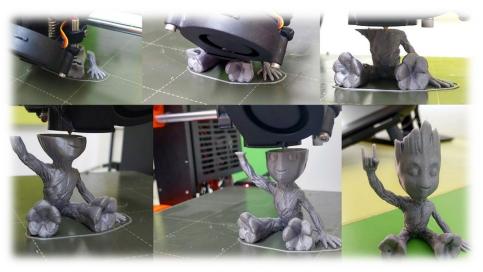
Figure 12: Ruse Fashion School



The final visit on the first day was to the Creative Centre in Ruse, hosted by Kalin Minchev, Creative Director and his team. The centre provides a series of workshops, summer camps and training programmes aimed at youth, to help them familiarize themselves with creative technologies and learn skills aimed at animation, VR, 3D printing and others. The centre is equipped with specialist equipment and has a predominantly voluntary team helping run the programmes, and similar to many initiatives of this nature, depends on a number of funding sources to provide these supports.







The second day of the visit to the Ruse ecosystem kicked off with a presentation from the Bulgarian Fashion Association. Bulgarian Fashion Association is a cluster organization which aims to support the fashion industry in Bulgaria and to integrate it in the European value chain through cluster partnerships with other European organizations in the field of fashion and sustainability, innovations, R&D.

The primary aims of BFA are:

- Integration of the cluster members into relevant international value chains to increase their level of competitiveness and export capacities.
- Support for the participation of SMEs in international trade fairs and exhibitions
- Operational support in the innovation process and technology transfer, providing technical assistance and support for the development of new R&D projects.
- The organization provides services in the field of internationalization, marketing, support for sales, knowledge transfer, networking, information dissemination and collaboration.



Figure 13: Presentation by Silvia Kabaivanova, Chairwoman of BFA







BFA seeks to build strong competences and form strategic alliances in the following areas:

- Help the creation of innovative/sustainable products with advanced textile materials.
- Advanced digitized manufacturing to enhance productivity and industry modernization.
- Circular economy and resource efficiency.
- Personalization in clothing production.

Bulgarian Fashion Association is partnering with Fashion.bg – a web community of more than 4000 companies from Bulgaria operating in the fashion value chain (clothing manufacturers, leather, shoe manufacturing, accessories, jewelry, textile, printing on textile). It is a member of the European Fashion Alliance, which aims to empower a prosperous European fashion ecosystem. EFA is a strong common voice advocating for and accelerating the transition of European fashion towards a more sustainable, innovative, inclusive, and creative future.

Following the meeting with the Bulgarian Fashion Association, the SPECTRA partners met with the representatives of the Municipality of Ruse. The meeting focused on the cultural initiatives and heritage of Ruse, the city being famous for its architecture and often referred to as 'the small Vienna', Ruse is home to many festivals, rooted in art and music, for example International Festival of Folklore, International Theater Festival and the Jazz and Blues Festival. It benefits from many cultural assets in the region, including the Regional Historical Museum, Museum of Urban Life and Culture and Ivanovo Rock Monastery, a UNESCO heritage site. The discussion focused on common challenges experienced in different regions, especially around overcoming budget limitations, continuous investment need, and national vs local/regional policy.

Figure 14: Municipality of Ruse Cultural Context



Work with the youth was also highlighted as a fous, as well as innovation – 100 ways to use aloe vera for example, and biodegradbale yougurt pots. They also highlighted focus on STEM in classromms, e.g. robotics with also a competition in this area supported by the Municipality.

Figure 15: Visit to the Ruse University













The meeting with the Municipality of Ruse was followed by a visit to the Ruse University, hosted by Georgi Hristov. Head of Department of Telecommunications. The university team presented the equipment and training provided by the department, including 360 cameras, post-production, VR projects on preservation of local heritage and 3D and 4D technologies, also including 3D printing, scanning etc. SPECTRA partners had the opportunity to engage with the VR production of the monastery site, which gave the opportunity to experience it in its original, historical state. Engagement with industry was discussed, which was highlighted as limited at this time, with some legal and regulatory obstacles that impede the university in ways in which they could, for example, provide commercial services or technology transfer services.

Finally, the second way was wrapped up with an interactive session with a Ruse entrepreneur Hristina Hristova, the architect and founder of KOLELIBA. KOLELIBA literally means 'a hut on wheels'. It's a play on words in Bulgarian.





'KOLELIBA' tiny houses are a step back towards a more natural and less demanding lifestyle. The cabins aim to create a relaxing atmosphere and turn into a spot to slow down and reconnect with nature. The concept is based on experiential architecture - architecture that serves needs focusing on pleasure for all the senses including touch, sight and even smell. That is what keeps the tiny house design process evolving. As architecture marks just the beginning of the building process, building tiny houses means in-depth understanding of precision, attention to detail and application of knowledge and skills by the team. The limited space in the tiny houses design requires creativity and involves complex overlapping of installations and structure.

6 Study Visit Germany

On the first day of the study visit to the Berlin Ecosystem the partner learning activities kicked-off with the meeting with Marte Hentschel- Co CEO of VORN- Fashion Hub situated at Bikini Berlin.

VORN – the Berlin fashion hub is offering space for collaborations for positive impact within the fashion industry and culture. It is a physical and digital place in the heart of Berlin, where innovations for a sustainable development of the fashion industry are collaboratively designed, communicated and implemented. As a registered cooperative, our focus is on the profitable business of a community. Their four programs Community Services, Innovation Lab, Scaling Program and Coworking Space create a pre-competitive environment for positive impact in the fashion industry: they are a marketplace for curated services. Their goal is an economically successful circularity in the fashion and textile industry as well as taking social responsibility and reducing CO₂ emissions. VORN is commissioned and co-funded by the Senate Department for Economics, Energy and Public Enterprises.

BIKINI BERLIN is the new concept for a listed building complex next to Berlin Zoo: an oasis in the heart of the city, an urban hub and social universe that is playing a key role in the transformation and success of the City West. The heritage-listed BIKINI BERLIN complex includes the Bikinihaus (Bikini Building) opposite the Kaiser Wilhelm Memorial Church, the large high-rise at Hardenbergplatz, the Zoo Palast cinema, the small high-rise with the 25hours Hotel and the car park at the Aquarium.

The 'Zentrum am Zoo' (Centre at the Zoo) ensemble, which was completed in 1957 by Paul Schwebes and Hans Schoszberger, is a symbol of the City West's cityscape and one of the few still preserved contemporary eyewitnesses to the eventful history of post-war Berlin.

By the end of the 1960s, more than 60 fashion companies had moved into the complex, producing and selling textiles and clothing. Once the Berlin Wall was erected, the ensemble of buildings fell into a sleeping beauty slumber, from which it was brought back to life in spring 2014 by the Munich-based Bayerische Hausbau following a respectful revitalisation. BIKINI BERLIN was born: a unique combination of shopping, gastronomy, workspaces, cinema, leisure, recreation and hotel – an urban, green oasis.

The centrepiece of the building complex is the legendary Bikinihaus (Bikini Building) with a total length of 200 metres. This was also the namesake of BIKINI BERLIN: local Berliners affectionately christened the building 'Bikinihaus' back in the 1950s. An open-sided storey framed by columns once divided the building into one upper and one lower area. The two-tier architecture, which is meanwhile fully glazed, reminded them of the daring new swimwear fashion of the time – the bikini.

BIKINI BERLIN is redefining the idea of a concept shopping mall, making it the pioneer of a new, slower shopping experience that's all about indulgence and wellbeing. Consistently differentiating itself from regular shopping centres, the concept shopping mall sees itself as a compilation of carefully curated and coordinated boutiques and eateries that invites visitors to enjoy slow, mindful shopping in a world that is spinning faster and faster on its axis. Modular pop-up boxes are also an integral part of the concept shopping mall. Like a typical Berlin pop-up store, they can be rented on a temporary basis. This gives well-known brands the opportunity to launch new products and also makes it easier for aspiring young designers to present their creations to the public for the first time. The highlight of the Bikinihaus building is the 7,000 m²,

freely accessible rooftop terrace, the BIKINI BERLIN Shopping Garden, which is inspired by New York's Highline Park and offers spectacular views into the neighbouring zoo. Exclusive office spaces can be found on the third to sixth floors.







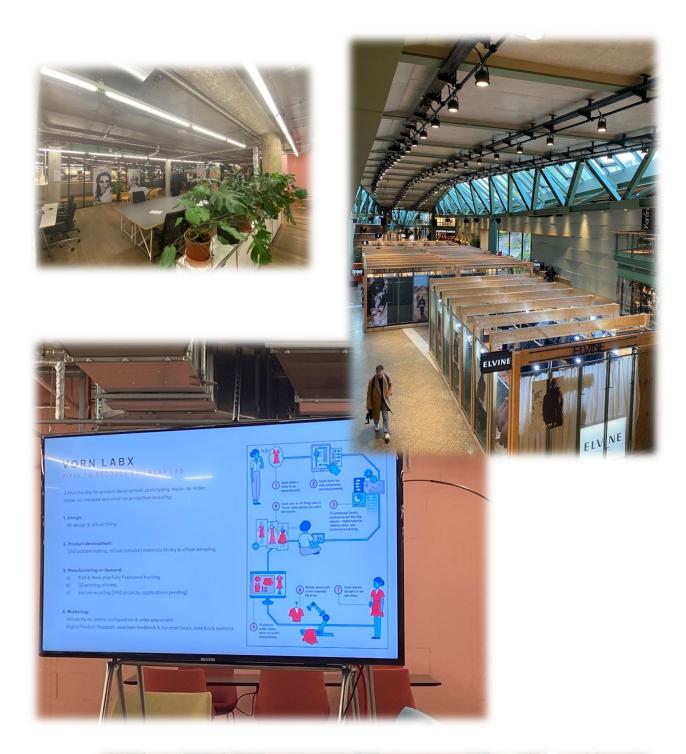




Figure 18: Meeting with Berlin Partner at IHK



This was followed by a meeting with Berlin Partner at the Industrie- und Handelskammer zu Berlin (IHK Berlin), the Chamber of Commerce and Industry of Berlin (CCI Berlin). Berlin Partner works on economic growth, promotes business, technology and innovation, and presents the advantages of the capital to companies, investors and talents.

Berlin Partner supports companies and scientific institutions that are already established in the region in their expansion plans and connects them within the strong Berlin Partner network. In addition, Berlin Partner's experts provide information on funding opportunities and advise on the search for suitable locations or highly qualified personnel.

Berlin Partner's successes are measured by a range of indicators: the focus is on the number of jobs that can be newly created or secured in Berlin with the support of Berlin Partner. In addition, it is worth taking a look at the investment volume and third-party funds raised. In the

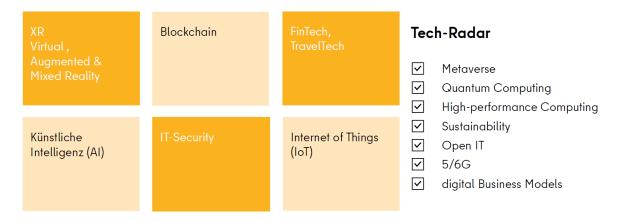
last year 2022, 8389 new jobs were created in just the 239 projects we successfully managed. In the process, around 1100 million Euro were invested and third-party funding of 140.1 million Euro was raised for research and development. Specifically, Networks and funding for Berlin based creative companies were discussed. Highlights discussed included:

- Headquarters of Axel Springer AG, Universal Music Germany, Paramount, Wooga, elt, DW TV, rbb, Netflix, Sony Deutschland, Zalando
- Berlin as an International event location: Berlinale, German Film Awards, Gamesweek,
 Deutscher Computerspielpreis, re:publica
- Film location for numerous national and international productions
- Germany's music capital with an annual turnover of 700 million
- Most varied newspaper region and Germany's strongest publishing location
- A hotspot for the international games industry and e sports companies.

Twice a year, Berlin Fashion Week brings fashion lovers and the fashion industry together. Numerous companies from the media landscape have settled in Berlin. All of the major international broadcasters, news agencies, and editorial offices are represented here. Various universities, research facilities and institutes form a unique science and training landscape.

Figure 19: Ovreview of Core Technologies in the Berlin Cluster

Core technologies in the cluster



The introduction of the Berlin Partner was also accompanied by a presentation on the activities of the European Enterprise Network. The Enterprise Europe Network (EEN) helps businesses innovate and grow on an international scale. It is the world's largest support network for small and medium-sized enterprises (SMEs) with international ambitions. The Network is active worldwide. It brings together experts from member organisations that are renowned for their excellence in business support.

Member organisations include:

- chambers of commerce and industry
- regional development organisations
- universities and research institutes
- innovation agencies.

These informative and interactive sessions were followed up by a consortium meeting where SPECTRA partners discussed the project progress and forward planning with a particular focus on Work Package 4, investor and start-up pitching activities.

Following the conclusion of the meeting on the project management activities, the SPECTRA partners had the opportunity to hear from and interact with Spielfabrique Professionalization programs presentation where Julia Krüger and Melanie Seifart presented on this initiative.

Figure 20: Spielfabrique – The Games Accelerator





Global Indie Mentorship

We create international mentoring programs for indie games studios.



Empowering Development

We boost video games development through mentoring and networking.



Global Market Advisory

We advise institutions, funds and studios to develop their international



Globalizing Local Gaming

We make local gaming ecosystem international.



SpielFabrique stems from a Franco-German video game initiative created in April 2015 by Media Deals at the French Embassy on the occasion of the International Games Week Berlin. As a catalyst for the video game ecosystem, they bring together all industry stakeholders to create greater understanding, knowledge, and collaboration. From mentoring indie game studios looking to bring their first game to market or established indie studios looking to scale up, to its consulting business towards public entities, SpielFabrique has built a comprehensive understanding of the video game ecosystem. Their goal is to stimulate international activity and strengthen ecosystems. Their annual pan-European programme comprises 6 intense months of workshops, networking, and 1-on-1 mentoring. The programme helps participants make the leap from having a functioning prototype to becoming a financially independent and successful studio.

Their supports include:

- international mentoring programs for indie games studios.
- Empowering Development boosting video games development through mentoring and networking.
- Global Market Advisory advising institutions, funds, and studios to develop their international market.
- Globalizing Local Gaming making local gaming ecosystem international.



Figure 21: Games Ground Conference



Finally, at the end of day 1, SPECTRA Partners attended a networking event and dinner at the Games Ground Conference 2023. This included a meeting with Medianet's Florian Masuth. Medianet berlinbrandenburg eV is a network association for the media, creative and digital industries. Medianet, together with the members of the network, politics, business, and science, creates cooperation on an equal footing in the Berlin-Brandenburg metropolitan region and beyond national borders. Medianet strengthens the locations as employer regions. Medianet is an impetus, supporter, doer and connects actors in an interdisciplinary manner on the common path to the digital future.

In addition to regular training opportunities for members' employees, they cooperate with universities, integrate market drivers of future technologies and record the business climate in the capital region with the annual median.barometer.

On day 2 of the study visit, the SPECTRA partners travelled to Potsdam to visit Studio Babelsberg.

Studio Babelsberg is one of Europe's largest film studio complexes, offering 21 state-of-the-art sound stages, flexible backlots and vast production facilities on a 42-acre lot. Take advantage of our exceptional production services, internationally experienced crews, and the diversity of attractive film locations, only a few steps from the vibrant city of Berlin that make Studio Babelsberg one of the most attractive film and TV production sites in Europe.

In 2018, Potsdam is classified as MediaTech Hub. Volucap at Studio Babelsberg, the first volumetric capture studio on the European continent, is one of its flagships. The circular studio, equipped with 32 cameras, makes immersive VR and AR projects possible.

Figure 22: Studio Babelsberg



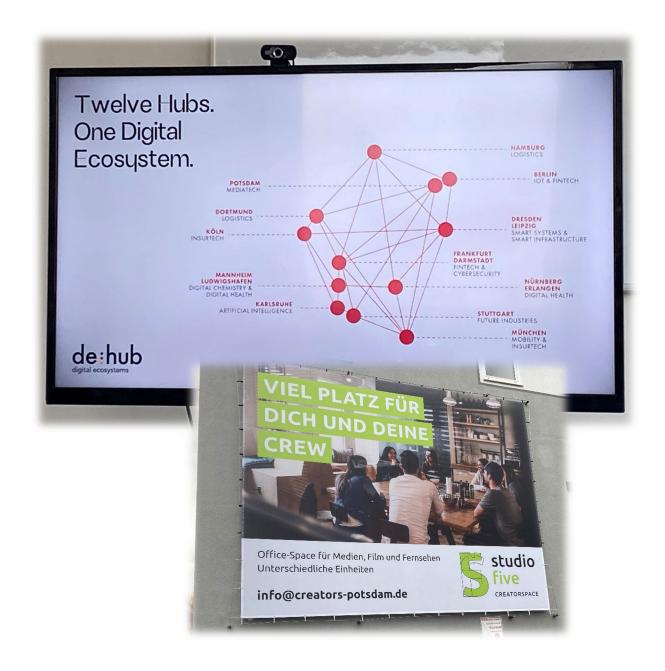
SPECTRA project partners had the opportunity to meet with the MediaTech Hub and Volucap.

The MediaTech Hub (MTH) Potsdam is the umbrella under which MTH bundles their community, projects and activities. They are all interconnected and interlocked - be it in their startup programmes like the MTH Accelerator or the MTH Space as well as their annual conference. With all the projects, MTH pursues a goal of further advancing the media tech ecosystem and shaping a more efficient, inclusive, and creative future. The SPECTRA partners benefited from meeting Andrea Wickleder, CEO

The MediaTech Hub Potsdam is the only digital hub in Germany with a focus on media technology. It makes media technology innovations from Potsdam visible, strengthens entrepreneurship and connects actors from the network and beyond (CONNECT!). Developing media-tech ideas and business models (DEVELOP!) is what the MTH Accelerator encourages young founders to do. It is the sparring partner for start-up teams in the early phase. The programme was initiated by the Hasso Plattner Institute, the Film University Babelsberg KONRAD WOLF and the University of Potsdam. In the heart of Babelsberg, the media city, MTH have created a space for media tech start-up teams. In the MTH Space, ideas and innovations are realised (DO!). Media technologies pave the way for every business. The MTH Conference brings together new ideas and business models, international perspectives and groundbreaking applications to think ahead together (THINK!). In an increasingly digital world, Knowledge Transfer is an essential factor for the ability to innovate and thus the key for business competitiveness and success. The MTH Innovator identifies itself as an MediaTech enabler and creates the framework conditions, in which MediaTech innovations can be introduced and applied in SMEs (MOVE!).



Figure 23: MediaTech Hub Potstdam



Following this very insightful presentation of MTH, SPECTRA project were treated to a visit to the attendance of the Volucap volumetric studio and interaction based in Babelsberg Park. Volumetric studio opened in Babelsberg just outside Berlin in 2018, driven by a high-profile consortium. New stereoscopic depth technology enables innovative forms of presentation for film and media beyond entertainment. Actress Emilia Schüle (known from Ku'damm 59, Traumfabrik) was the first person to be recorded in the volumetric studio at the opening.

The studio is located on 170 square meters in the fx.center on the grounds of Studio Babelsberg and is equipped with 32 cameras, which are installed all around on a nearly 4 meter high light rotunda. People and objects can be scanned three-dimensionally and lifelike in the room. The corresponding basic technology was specially developed by Fraunhofer Heinrich Hertz Institute. The previous prototype of the volumetric video studio is for laboratory use only and has been in operation since October 2017. The installed software "3D Human Body Reconstruction" does not create digital avatars but creates hologram-like representations of real people that can be processed like computer-generated models. The actors recorded in this way can be placed in real and virtual worlds. It is also possible for spectators to enter the world with the help of VR

technology and view the events and the person photographed or the object photographed from every possible angle.



Figure 24: Volucap Volumetric Studio and adjacent Studio Premises

It is not only in the film industry that completely new possibilities for narrative forms towards "walk-in film" arise. As the first commercially used studio on the European mainland, the new technology can also be used for professional commissioned productions in many areas of media beyond entertainment such as in medicine, automotive or the games industry. Compared to the existing solutions, including studios in London and San Francisco, Volucap is pursuing a new concept that is future-oriented towards an even higher quality and will also be used for cinema productions in the long term.

For commercial use, the shareholders ARRI Cine Technik GmbH & Co. Betriebs KG, Fraunhofer-Gesellschaft, Interlake System GmbH, Studio Babelsberg AG and UFA GmbH founded the joint company Volucap GmbH.

One of the high-profile production projects Volucap has been involved in is the latest movie in the Matrix series. Daniele Massaccesi has operated cameras for John Toll on Wachowski projects including Cloud Atlas, Jupiter Ascending and Sense8. They collaborated with the director to reimagine the groundbreaking 'bullet time' visual effect of The Matrix for Resurrections. Sven Bliedung von der Heide, CEO of Volucap also worked on visual effects for Cloud Atlas at the time and is familiar with Lana Wachowski's high expectations. In advance, many camera manufacturers were tested and evaluated for use by Volucap. Red was able to deliver the necessary data quality, which was required for demanding volumetric captures.

Volucap was involved in the early development of particularly demanding action sequences and visual effects and worked for a total of two years with the Matrix team on the franchise's new sequel. Apart from the fact that there were only short distances between the facilities on the studio lot, the production appreciated the high level of professional and technical expertise and a team who knows how to adapt completely to its clients from Hollywood.

The latest development of Volucap includes the possibility to produce footage underwater, and mobile studio facilities. In a custom-built underwater tank at a depth of 7 meters, it took the Volucap team 2 months to develop the world's first volumetric underwater film studio from initial concept to successful on-set deployment.

Underwater housings, triggers and cable systems designed by Volucap allowed live views above water of all cameras in 4K with 10bit and 60 frames per second. The specially developed cable system protects against water penetration into the housing even if a cable is cut in an emergency underwater. With an 8k UHD resolution per camera, a maximum total system resolution of over one gigapixel per frame can be achieved. Special speakers enabled easy underwater communication with divers and actors. All cameras are controlled and synchronized remotely, and heat dissipation for continuous operation was realized by additional air and heat dissipation of the housing. Calibration systems and the proper Volucap processing software for volumetric film data also had to be adapted to the challenging conditions.

The new unique mobile solution for ultra-high resolution volumetric video capture will also open up a new realm of commercial opportunities.

Following this exciting experience of a company active in the Babelsberg ecosystem, SPECTRA partners, engaged with Mafalda Duarte, Head of Studio Telescope Game Studios UG. Mafalda in the addition to building a team to work at game development, is also an ambassador for Women in Games and also work for the organisation as Ambassador Coordinator. In 2022, she co-founded the Game Dev Lisbon collective with other game developers based in Lisbon, with projects such as Game Dev Camp since 2020, Spotlight Awards and most recently, Spotlight Magazine.

Telescope Game Studios are a part of a trail-blazing studio group run by passionate storytellers. Utilizing cutting-edge real-time tech, they create interwoven story universes for global audiences. Their narratives span across animated films, series, games and immersive experiences with heart and soul.

Their two animation and game studios are powered by a proprietary process and Unreal Engine production pipeline and have been awarded with two MegaGrants by Epic Games, as well as an innovation grant by the European Union.

Telescope Game Studios stand for equality, diversity, and inclusion – in their projects and their team. By integrating green workflows, a no-crunch policy and remote work capabilities, they provide a sustainable, inspiring environment for creators.

Figure 25: Telescope Game Studios



The management team is led by producer Maite Woköck and creative director Reza Memari, who have developed their joint expertise over decades in the entertainment industry.

Telescope Animation GmbH was founded in 2018 and is based in Berlin. The animation studio Telescope Animation Studios GmbH was founded in 2020 and is based in Hamburg. The game studio Telescope Game Studios UG was founded in 2022 and is based in Brandenburg.

The partners were treated to a preview of the concept trailer created by the Telescope team, featuring a rebellious teenage humpback whale that ventures to the deepest sea with his companions where he must claim his destiny and summon his mystical song to save the oceans from destruction by a monstrous creature – who has emerged from a melting iceberg.

The day 2 of the study visit concluded with a presentation by Prof. Dr. Björn Stockleben, Professor of Emerging Media Production. Head of Studies Film- and TV Production Programme, Co-Head of Creative Exchange Studio (CX Studio) at the Filmuniversität Babelsberg KONRAD WOLF, together with Jörn Krug, the Project manager of the start-up service & MOVE2startup.



Figure 26: Filmuniversitaet Babelsberg Konrad Wolf

The Babelsberg Film University is a lively place for film; it stands for a variety of materials and forms, genres and formats, for specialization and exchange. In their unique trade-oriented and interdisciplinary training, creative personalities develop their filmmaking attitude. They teach and research both scientifically and artistically and thus actively shape the development of media, science and society. In research, the film university pursues a variety of topics, approaches and projects that can be assigned to seven major research fields:

- Aesthetics and narrative
- Reception and appropriation
- Society, knowledge, and social intervention

- production and industry
- Technology and innovation
- History and cultural heritage
- Gender and diversity.

Film University Babelsberg KONRAD WOLF's Startup Center focuses on creative entrepreneurship and is ranked #2 in Germany for spin-off support. From supporting initial ideas to enabling transition to the market, FBKW brings together creatives, business, and technology to solve societal challenges with novel entrepreneurial approaches and aims to broaden their network in cooperation with international partners focused on creative technologies and cultural entrepreneurship. Students, alumni, and academic staff of the Film University Babelsberg interested in founding a company or considering a freelance career will find a wide range of free services and support here - from the initial idea to the transition phase to the market. We advise, accompany, and qualify in media-specific trainings, workshops, and consultancies. With the support of external coaches and mentors, we offer particularly intensive support to viable start-up projects.

They also run a Creative Enterprise Challenge. Creative Entrepreneurship here is defined as putting creative and entrepreneurial competences to work together. The seminar aims to prepare participants for a professional reality in which these practical competencies are increasingly demanded - whether in freelancing, founding a company, in projects or in employed work. In this workshop current challenges in media and society are crossed with interdisciplinary problem solving. In interdisciplinary, cross-university teams, participants work on particular relevance and originality for novel, creative business models. The course is aimed at students, alumni, and employees not only of the Film University, but also of partner universities - within and outside the creative industries. The seminar is looking for dedicated people who are interested in better understanding social and creative business challenges and solving them with novel entrepreneurial approaches.

The partners were also part of a deep-dive into the University's ecosystem, getting a sense of partnerships, collaborations, and networks, as well as funding supports, sponsorships and projects, an example being MOVE2startup, which is the laboratory for creativity-based entrepreneurship at the Babelsberg Film University.

The lab promotes creative originality as a basis for media innovations. This looks at the impact on the creative industry and well beyond it. A wide variety of disciplines work together as teams on innovative solutions, facilitated by a strong international and regional partner network to support the start-up projects.







https://www.linkedin.com/company/spectra-euproject/



www.spectraproject.eu

