

Collaboration and Innovation in the Northern Dimension Countries

STUDY

Dr Petya Koleva January, 2021









The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

TABLE OF CONTENTS

Executive summary	4
1. Context and Background	8
2. CCI Connectivity and Cross-Sectoral Innovation	12
3. CCIs innovating Traditional Industries (ITI)	16
4. The well-being agenda crossing sectoral and disciplinary boundaries	21
5. Key findings	26
6. References and resources used	31
7. Contributors	33

Executive summary

The wider project, "Cross-sectoral cooperation and innovation within Creative and Cultural Industries - practices, opportunities and policies within the area of the Northern Dimension Partnership on Culture", was conceived and its activities supported by the Northern Dimension Partnership on Culture (NDPC) secretariat. One of the aims of this project was to support the NDPC's 2021–2024 strategy development.

The key objective of the study 'Collaboration and Innovation in the Northern Dimension Countries' was to assess the ability of CCIs to connect with other sectors and contribute to cross-sectoral innovation. It is the foundation for defining CCI inter-sectoral 'cross innovation' potential and international opportunities related to the Northern Dimension countries.

Recent cross-sectoral innovation activities were mapped using a mixed-method approach on identifying case studies that form the background to this document.¹ They were collected in the course of nine months from: Denmark, Estonia, Finland, Germany, Iceland, Latvia, Lithuania, Norway, Poland, Russian Federation and Sweden. These are the countries which constitute the Northern Dimension (ND).

The general context based on key findings of the study can be summarised as follows:

high degree of CCI innovation awareness

a variety of initiatives at different phases of development in the eleven countries

diverse stakeholders (companies, not-for-profit entities, academic institutions, international partnerships, start-ups, consortia involving diverse stakeholders)²

very quick pace of change of the role of CCIs in relation to professional collaboration for innovation

different degrees of policy and funding support at national or local level (from high priority to recognition of achievements)

Seven general trends have been identified of relevance to various stakeholders and to the NDPC's future strategic positioning and identifying potential priority policy action and activity areas.

 ${
m 1\hspace{-0.9mm}l}_{\circ}$ Connectivity as a key for the preparatory phase of cross-sectoral innovation teamwork

2. Knowledge-sharing on CCIs' roles as mediators or initiators of cross-sectoral innovation

3. Multilevel approaches to innovation risks taken by diverse partners

Broader definition of CCI innovation and its impact (including 'soft' innovation)

5. Attention to long-term assessment of impact and tracking results

 $oldsymbol{\mathbb{G}}_{\circ}$ Broader vision of cross-innovation in relation to sustainable development goals (SDG)

 $\sqrt[7]{}$ Legal frameworks facilitating CCIs' involvement in cross-sectoral innovation

In order to gain in-depth insights into cross-sectoral innovation, the collected 121 cases were grouped and analysed in three main domains of cross-sectoral innovation initiatives corresponding to the themes of the Expert's Focus Groups held during the course of the project.

¹ Annex 1 contains all 121 cases grouped per thematic domain.

² The profile of stakeholders is presented in detail in Chapter 5 Key findings.

It is evident from the analysis that initiatives in each of the domains face specific challenges and their impact determines clearly their future significance.



Innovating (traditional) industries

There are 46 cases (38% of the total) in this largest group that has benefited most from public support and is yielding large-scale impact at regional level. There are six challenges and respective solutions³ drawn from the field that indicate areas for improvement.



Connectivity between CCI professionals/ organisations and other sectors

Forty-three of the cases (35% of the total) address this objective with some initiatives demonstrating decades of experience. Key challenges have been defined and the proposed solutions may be of interest to newcomers in the domain.⁴



Innovation related to the well-being agenda

Thirty-two of the mapped 121 cases, (26% of the total), fall in this domain. Five are the proposed solutions key to innovation challenges in this domain.⁵

SIX KEY CHALLENGES:

- 1. Securing the interest and participation from funders, companies, public, consumers
- 2. Raising money for an experimental project going across sectors
- 3. Creative entrepreneurship and raising competences
- 4. Funding for cross-sectoral collaboration
- 5. Overcoming language barriers in learning and knowledge transfer processes
- 6. Scaling the initiative to its full potential

THREE KEY CHALLENGES:

- 1. Obtaining initial funding for developing 'something that has no record of success yet'
- 2. First cross-sectoral activities with customers/ clients and raising team competencies
- 3. Initial phase of innovation value chain (from idea development to first prototype) – high risk for SMEs and micro enterprises

FIVE KEY CHALLENGES:

- 1. Initiating dialogue between professionals of different sectors
- 2. Well-being practices 'out of scope' for current support
- 3. Finding artists with dual competence
- 4. Getting everyone (community and micro companies, the local authorities) committed
- 5. Sustainability of the crosssectoral output

FUTURE SIGNIFICANCE:

affect multiple entities: economic or public sectors

FUTURE SIGNIFICANCE OF THESE INITIATIVES:

- value chain innovation
- recent policies
- virtual platforms for connectivity
- scaling of initiatives

FUTURE SIGNIFICANCE:

- health
- well-being at individual and social level
- resilience

³ These are elaborated in Chapter 3.

⁴ These are elaborated in Chapter 2.

⁵ These are elaborated in Chapter 4.

Innovation impact per domain

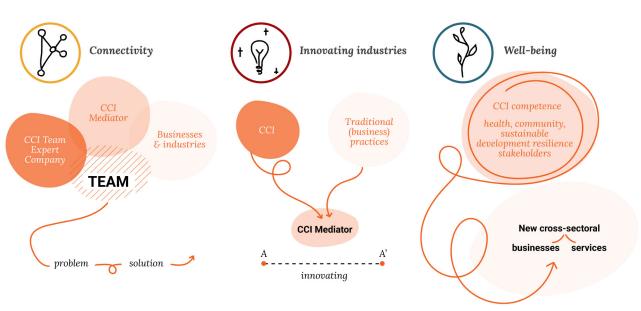
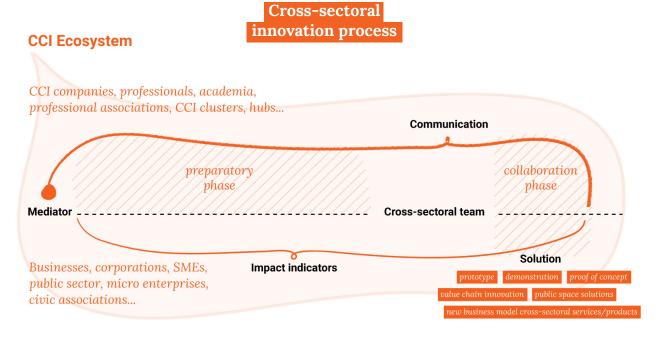


Image 1: Innovation impact per domain (nonexclusive typology)

There is also a specific innovation impact that defines the respective cross-sectoral terrain of collaboration. In the domain of 'connectivity' for innovation the impact is strongly associated with innovations solving a unique (business) problem. The second domain addresses a context that alters the way 'traditional' businesses operate and is likely to affect similar entities and related stakeholders. The well-being domain demonstrates its impact on new types of businesses and services that depart from the CCI base of competences.



 $Image\ 2:\ CCI\ collaboration\ for\ innovation,\ a\ cross-sectoral\ innovation\ process\ general\ model$

The image above illustrates that cross-sectoral innovation initiatives in the three domains typically result from a process of collaboration via establishing a cross-sectoral team. Another common trait is that the preparatory phase

demands considerable attention and resources. It is crucial for the success of the innovation initiatives.

Three fundamental activities complement this model: the role of a CCI mediator, impact indicators being developed and communication activities. All three begin at the onset of the preparatory phase.

Details on methodology and limitations are presented in Chapter 1.

The project team, composed of Terry Sandell, Petya Koleva, Yulia Bardun, Signe Adamoviča, Liene Lesiņa and Michela Di Nola would like to thank all the contributors to the study. Their involvement has been vital and while facing the new challenges of a post-pandemic world they sustained the ethos of sharing and learning making the most of a fully remote manner of operation.

To turn this into advantage the team proposed a large-scale participatory consultation in synergy with three online thematic experts' focus group events in June, September and November 2020. Many experts took part and provided more insights into cases already mapped or pointed to new ones. The list of contributors is presented at the end of the document.

A good number of the documented cases may be considered pioneers in establishing long-term platforms for cross-sectoral innovation. In view of this, the project has dedicated additional attention and effort in order to provide an **open-access, web-based resource** – ndpcrossinno.eu



 $Image\ 3: SPOK\ (Contemporary\ production\ and\ consumption),\ Photo\ by\ Marcus\ Brumstr\"om$

It is accessible to anyone and uses an engaging story-telling approach. The project has foreseen that it will be live for at least 24 months after its launch and be used as a resource as well as an informative policy tool. Detailed information on all four online expert groups held during the course of the project, as well as the policy briefs, can also be found there.

Context and Background

WHY THIS STUDY

The Northern Dimension Partnership on Culture (NDPC) is the fourth Partnership in the Northern Dimension Policy, a common policy for four equal partners: the European Union, Iceland, Norway and the Russian Federation. The NDPC Secretariat has been based in Riga since 2018.

The NDPC is focused on improving operational conditions for cultural and creative industries. It endeavours to bridge the gap between various sources of funding and sectors of activity and to strengthen cooperation between project owners, business communities, the public sector and international institutions throughout Northern Europe. One of the aims of this project was to support the NDPC's 2021–2024 strategy development.

Specific Objective - to map context and inform policy makers

Through case studies⁶ gathered from each of the eleven countries, the project has attempted to identify the degree of cross-sectoral innovation currently taking place between the cultural and creative industries (CCIs) and other social and economic sectors. The result of this mapping and the recommendations that accompany it are of relevance to various stakeholders but contribute in particular to the NDPC's future strategic positioning and identifying potential priority policy action and activity areas.

DEFINITION OF SCOPE

In the context of this project 'cross innovation' has been defined as 'a process by which CCIs share information, collaborate and work with other growth sectors to promote new thinking as well as innovative products, services and activities.'

The research scope covers the Northern Dimension region at the level of actual practices of cross-innovation and related systemic/policy contexts that foster their development or present barriers to expanding their potential. It looks at what could be addressed in the future. It has sought to collect evidence of:

- (a) type of cross-sectoral innovation practices,
- background to initiatives
- type of stakeholders
- relevant policies/context
- output, barriers and success indicators
- impact analysis
- additional information regarding needs, competition/cooperation and new developments

It has been agreed that the number of case studies is less important than their relevance i.e. quality is more important than quantity. In this context the target was seven good case studies per country.

RESEARCH APPROACH AND LIMITATIONS

This first study mapping cross-sectoral innovation in the Northern Dimension departed from the premise that the Cultural and Creative Industries (CCI) context of each of the eleven countries was already established. There exists a broad understanding of its positive impact, enhancing economic and social development as well as innovating growth sectors, (Bertschek et al 2018; McNeilly 2020, Heliste et al 2015). The 2018 evaluation of NPDC activities found that the climate was ripe for more international events on cross-sectoral themes and that more online networking across the countries would be timely (Laaser, Weber and Staines 2018).

The time-frame for mapped activities has been from 2018 onward and the research was based on a bottom-up approach to defining the context and cross-sectoral innovation activities in three domains.

For the above reasons, the field research collected evidence of current cross-sectoral innovation without imposing rigid 'sector' or 'discipline' classifications. It did not challenge theoretical frameworks or address all types of innovation processes. Instead, the terms used have derived from the information gathered, in interaction with case study contributors. The specific references to incremental innovation, experimentation, proof of concept, prototypes, design sprints, value-chain, internationalisation etc. derive from the field of practice.

The study is based on qualitative research of initiatives/activities and of their results/impact on the specific crosssectoral context as defined here.

1) Primary source data has been collected using four instruments.



An dual language (English and Russian) online survey was launched in March-May 2020. Due to the Covid-19 pandemic there was no public event to launch this initial phase of the field research. Therefore, the online survey, estimated to have reached about 1000 recipients in the 11 countries produced anticipated modest feedback with 36 responses.7 (It coincided with intensive promotion of COVID-related questionnaires addressing the same target groups). Other activities compensated for this initial slow reaction. That said, in retrospect a physical or dedicated online preparatory meeting with stakeholders before the survey might have secured a better response rate from several countries including Norway, Poland and Lithuania.



In addition, a case study template⁸ was also developed in the two languages of the project (English and Russian) in order to provide more in-depth feedback on the cross-innovation impact and potential for development. This template has been sent individually to over 350 recipients in the 11 countries, while the total wider reach is in excess of 15,000 people from all ND countries.9 The interest in participation grew exponentially after each (online) event of the project. For this reason the work was extended from May as originally envisaged to mid November 2020.



The most in-depth instrument used in the study was a structured virtual interview lasting up to 60 minutes. In total, there were 23 virtual meetings with experts from the Northern Dimension region. These were held with representatives of cross-innovation initiatives, policy makers, CCI incubators, businesses and creative professionals.

⁷ It coincided with intensive promotion of COVID-related questionnaires addressing the same target groups.

⁸ See Annex 2 in English and Russian

Estimation based on statistics of the social media posts published during the project on the Facebook page of NDPC.

To complement the research progress, the team also worked to identify fourteen flagship cases.

These were developed, published and shared on social media channels. They served as a project showcase defining closer the Study's goals and inspiring more CCI and other relevant actors to join the study and follow the project's activities.¹⁰

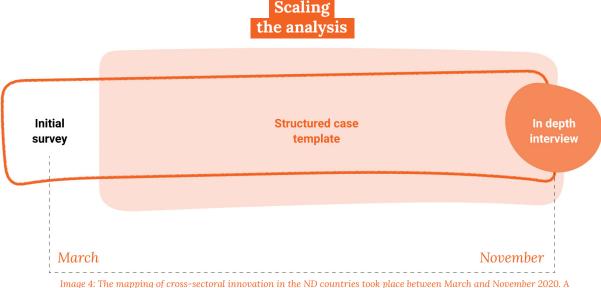


Image 4: The mapping of cross-sectoral innovation in the ND countries took place between March and November 2020. A mixed method approach was used to scale the scope and depth of analysis.

2) Secondary source data, such as published reports, online publications and articles on cross-sectoral innovation in the 11 countries have also been collected in order to expand the ground for analysis with regard to relevant initiatives. All of the 121 case studies included in Annex 1 were contacted for further information with several providing additional detail.

ANALYTICAL APPROACH

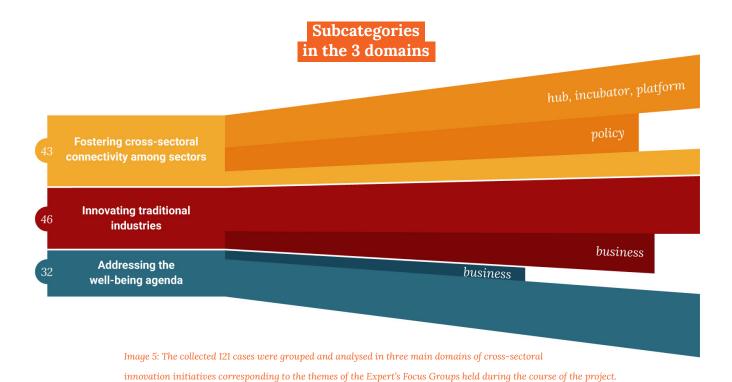
The field research, in view of the COVID-19 pandemic context, was re-designed to adapt to a fully remote manner of operation. To turn this into advantage the team proposed a large-scale participatory consultation in synergy with three online thematic experts' focus group events (replacing the physical workshops). They convened in June, September and November 2020 on the following themes:

- The Partnership Market CCI Connectivity and Cross-Sectoral Innovation

 Hearing and dancing? How can the Cultural and Creative Industries engage with 'Traditional Industries' to mutual benefit?
 - Getting Better? CCIs engaging with Well-being: building inclusive communities and resilient societies.

Flagship cases: .#1 Cross-Innovation Hub (Hamburg, Germany), #2 Science and art centre "Brewery" (Cesis, Latvia), #3 EcoDesign Circle (Germany, Sweden, Russia, Finland, Estonia, Poland) etc. See: www.ndpculture.org/projects-co-financed-by-the-eu/cross-sectoral-cooperation-and-innovation-within-creative-and-cultural-industries

Seventy people engaged in the first three online events and each of the interactive formats provided an occasion for participants in the study and other experts to explore the topics in-depth and expand information gathering. Each of the Expert Focus Groups was dovetailed into the production of a subsequent policy brief.



This thematic focus was retained in the analytical framework used for the 121 case studies which were collected over nine months.

Primary and secondary sources were used to research in more depth the initiatives

- supporting connectivity among sectors;
- 2) innovating (traditional) industries
- addressing the well-being agenda.

In addition, special focus is placed on defining:

- background to initiative;
- specific innovation activities;
- challenges faced and solutions;
- impact analysis;
- new developments.

Sub-categories that emerged in the course of mapping cases illustrated the presence of private business or independent initiatives which were prominent in two of the domains. In one of these, an additional sub-category emerged on recent policies specifically developed to support cross-sectoral innovation that foster connectivity for cross-sectoral collaboration. The following chapters provide more details on these aspects.

CCI Connectivity and Cross-Sectoral Innovation

BACKGROUND AND SPECIFIC INITIATIVES

A large segment of the mapped 121 cases, 43 of them (35% of the total), addresses the objective of **improving the connectivity between CCI professionals/organisations and other sectors** with the aim of generating cross-sectoral collaboration for innovation.

Just over half of cases, 22 out of the 43, are CCI incubators, hubs or multi-stakeholder platforms for connectivity. Across the ND countries, the local context determines the readiness of CCI actors to cross sectoral boundaries in innovation activities.

Examples such as the Art_Inkubator in Fabryka Sztuki in Lodz, Poland and the incubator Klump Subtopia in Sweden demonstrate a shared focus on enabling CCI micro and social enterprises to develop innovative business models, products or services. The Narva creative hub OBJEKT in Estonia, where the CCI sector is 'still emerging' or growing, is primarily addressing would-be entrepreneurs in a specific business area, such as the fashion industry. In the three cases the focus is on promoting conceptual and business skills. The feedback of former participants demonstrates long-term benefits for them as well as a lasting empowering effect on the local creative ecosystem. In all these cases connecting CCIs with other industries is seen as an important new objective.

In other contexts, CCI innovation platforms have been paving the way for this 'new' cross-sectoral innovation terrain over several years. Applying a synergetic approach, the "Cross Innovation Hub" at Hamburg Kreativ Gesellschaft in Germany is developing its in-house methodology for cross-innovation processes. It does so by networking with a large spectrum of industrial sectors and building upon the existing connection to a strong local CCI ecosystem. The approach is specially designed to meet the needs of each (non-CCI) industry client. Another example is Creve (Creative Venture), offering virtual business services and a learning environment for entrepreneurship. It is being developed and managed by Humak University of Applied Sciences in Finland. Creve's ability to thrive using only a virtual platform that attracts international participants, including diverse businesses, demonstrates the potential of scaling up platforms for connectivity.

Similarly, the cross-sectoral initiative SPOK (Contemporary Production and Consumption) has developed a digital platform facilitating collaborations between designers, architects, interior designers and other creative professionals through identifying manufacturing possibilities locally in Sweden. This is associated with the importance of developing new concepts, methods, e-learning, virtual training formats. There is also the objective of raising awareness among stakeholders and public of sustainable forms of local manufacturing and consumption. The platform developed locally is becoming a national initiative due to its proven impact. It took four years to elaborate a unique business model to sustain it.

Specific innovation policies are an important factor grounding cross-sectoral connectivity in 15 of the 43 cases. These include:

The German Government's Centre of Excellence for the Cultural and Creative Industries addresses the area of 'non-technical' and creative innovations, a priority shared by Kreativ Gesellschaft in Hamburg.

The Expertise Programme 2014–2020 coordinated by Creative Finland supports activities linking the CCI and other growth sectors for collaboration has led to initiatives such as the "HerääPahvi!" project that brings together experts from creative industries and the forest bio sector.

The Swedish Agency for Economic and Regional Growth in 2019 provided support to SPOK (discussed above) to expand the initiative across Sweden and embed government's actions to increase domestic manufacturing and development of industry.

The Danish Sound Cluster has obtained support from the 2021–2024 programme of fhe Ministry of Higher Education and Science and from the Danish Executive Board for Business Development and Growth. Activities include innovation projects, collaborations, incubation and internationalisation and it is already running an Urbantech innovation programme.

#GovLabLatvia uses design thinking to solve problems implying different sector policies and a similar approach is used in the Creativity Week radi! also supported at national level to facilitate solutions to current challenges in the regions.

A recent initiative channelling attention to cross-sectoral innovation is the 'Culture Online Award' in the Russian Federation.

Several regional platforms (involving multiple partners from ND countries) underline the importance of support from the European Territorial Cooperation (ETC) programme (better known as Interreg), the Creative Europe and Horizon 2020 EU programmes. Cultural and natural heritage related to sustainability, creative tourism, new governance models, value chains of CCIs, internationalisation of CCI activities and services for diverse sectors are addressed by cases such as: Creative Ports (2020–2021), Laboratorium Regionów – city lab and publication (2021–23), The CLIC Project (2017–2020), CAST, (2018–2021) and Contents for Cross-cultural Events – C3E (2018–2021).

The challenge of establishing collaboration between diverse disciplines and sectors is taken up by independent / private initiatives in countries where policy or programme support is not specifically tuned for cross-sectoral innovation. An example is the case of Otmetky in the Russian Federation which connects IT, urban design and sociology by creating digital maps or 3D models from the analytics of online surveys to find out what citizens want in the city. It serves the interest of real estate developers, of municipalities and of course of citizens and urban activists. One more case is Science and Art Centre "Brewery" developed as a private initiative by the Institute for Environmental Solutions (IES) in Latvia. Since 2013, IES has been developing it into an international centre of excellence where science, art and engineering can be fused together to address environmental issues. It has already produced several successful results, which demonstrate the benefits of cross-innovation. Other initiatives such as Demola Innovation, springing from Nokia in Tampere, have spread across the ND region and beyond.

Artist-run hubs, co-working spaces or communities as well as festivals also show the vigour of knowledge-sharing across regions as well as focus on exchange of innovation expertise across sectoral boundaries. Various initiatives underline the importance of long-term support (from several year grants to continuation support) as they seek to expand collaboration among sectors as well as integrate knowledge-sharing activities across countries. The Trans-Halles network participates in several EU-funded projects which allows its Nordic hub to provide international expertise and sustain innovation, e.g. implementing virtual 'job-shadowing' across the network members even before the

COVID-19 pandemic. The Trans-Halles network is involved with development of creative economy impact indicators through the EU-funded project DISCE (2019–2021). The Institute for Environmental Solutions (IES) in Latvia, just mentioned above, participates in large-scale projects under the EU LIFE programme – tackling climate change and environmental issues.

Integrating cross-sectoral connectivity as a priority in existing cross-sectoral forums is also common, often involving an academic institution or research centre as a partner. In its 2020 edition, The Arctic Frontiers Conference highlighted the link between careers and innovation in sustaining the future of the Arctic with support from UiT the Arctic University of Norway. The Telaketju project and network in Finland is running a second phase project on textile recycling involving academic and industrial partners. Another example is the Innovation Pioneers social network and learning platform in Sweden founded by innovation leaders and practitioners from a wide cross-industrial background of companies, organizations, government agencies, academia, research and start-ups. It invests in broadening the focus on innovation at both a strategic and operational level.

CHALLENGES AND SOLUTIONS

Analysing challenges related to cross-sectoral innovation practices and identifying solutions found in each of the sub-domains has, as explained earlier, been a priority for the project. There are three key challenges identified in the domain of 'connectivity'.

CHALLENGE	SOLUTION
1. The effort to obtain initial funding for developing 'something that has no record of success yet'. This applies both to setting up a CCI hub or incubator as well as establishing a common vision across several sectors on what could be achieved and developed.	National and local funding support for the knowledge-gathering and knowledge-sharing efforts and for initial experimentations are vital. Recognition via selection and award schemes leverages support.
2. The effort to draw the model, find the first interested partners and try the first cross-sectoral activities with customers and clients, be they private or public. Raising the competencies of the team for structuring a cross-sectoral innovation platform is a continuous challenge.	Collecting the first demonstration 'pilots' and 'examples' that cross-sectoral innovation leads to tangible results are highly effective tools to demonstrate the potential of the efforts in the long-term. Continuous funding and lead organisations/providers with a strong strategy are needed to build effective and continuous networks and services.
3. The initial phase of innovation value chain, which bears the highest risks (from idea development to first prototype), presents a challenge for most industry partners as it is tied to a long-term vision and strategy while many companies are SMEs or micro-enterprise.	Mediator competences and methods are crucial for shaping the dialogue and establishing interest. National and international policies and programmes empower the business awareness of cross-innovation collaboration. Support for the mediator role needs to be long-term.

IMPACT ANALYSIS / DEVELOPMENTS

Tools to define and measure impact are seen as vital for cross-sectoral connectivity in all of the mapped cases, both in the preparatory phase as well as for monitoring the long-term success. At the same time, across the ND countries, the CCIs also face the challenge of integrating indicators and dedicating resources to monitor impact. Almost all fruitful experiences provide evidence of the benefit of introducing indicators of expected achievements. They do not only aim to capture end-results such as prototypes but also monitor the growing number of experts involved and the enlarged pool of industrial partners and CCI experts participating in cross-sectoral innovation.

There are also best practice examples:

The virtual platform of SPOK is digitally tracking the choices and behaviour of users so that future 'encounters' leading to collaboration can be better facilitated.

Taylor-made, in-house methodologies for measuring the impact of cross-innovation and further collaboration in the long-term are already being developed at Kreativ Gesellschaft and Creve.

Digital monitoring of user experience is now normal practice for most business initiatives that thrive in the digital age. They are also taking regular stock of the new partnerships being established, the new business opportunities explored, access to funding and new market opportunities.

Knowledge-sharing across the Northern Dimension region with regard to cross-sectoral innovation challenges is clearly the way forward.

Three cases promoting cross-sectoral connectivity covered in the domain of connectivity also participate in the new "Portobello People" initiative. It aims to establish a strategic business network of culture incubators in the Nordic and Baltic countries and NDPC is one of the partners.



Image 6: Cross Innovation Lab 2019, GEA digital valve twin AR prototype for easier maintenance. Photo by Laura Mueller, courtesy "Cross Innovation Hub"

CCIs innovating Traditional Industries (ITI)

The largest segment of the mapped 121 cases, 46 of them (38% of the total), addresses the objective of **innovating** (traditional) industries and empowering cross-sectoral collaboration.

BACKGROUND AND SPECIFIC INITIATIVES

All industries innovate and all companies as well as social initiatives seek fresh solutions to creating products or services that are competitive on the market and in line with new needs, such as green economy and sustainable development. It is therefore no surprise that innovation associated with competences in design, architecture, music or broadly speaking creative industry skills/competences is embedded in all sectors.

Design thinking, services design and new ecological, circular economy principles are prominent among the cases in the domain of innovating traditional industries.

The project EcoDesign Circle (4.0) demonstrates this relevance. It is the extension project of the EcoDesign Circle Interreg Baltic Sea Region project and continues until January 2021 with an enlarged scope involving partners from Estonia, Finland, Germany, Lithuania, Poland, Russia and Sweden. It improves the capacity of design centres, design professionals and enterprises in ecodesign leading to advanced innovation performance in many traditional industries. By May 2020, 131 SMEs had received support for integrating ecodesign principles. For instance, the partner in the Russian Federation, Medina Art, developed a pilot project based on the EcoDesign Audit and EcoDesign Sprint technologies for the First Furniture Factory LLC (Saint-Petersburg) focusing on the development of new products and service offers. On the one hand, this demonstrates the very pragmatic basis for cross-sectoral innovation. On the other, the fact is that a CCI company, in the role of mediator, also produced an overview of legislative acts and support measures available in the Russian Federation in the field of sustainable development and circular economy in order to spread knowledge and facilitate innovation across multiple business actors' scenarios.

A large number of other cases represent large-scale initiatives involving one or more ND partners supported by EU funds and notable for explicitly addressing innovation of the value-chain including:

- The Creative Industries Cultural Economy Production Network CICERONE (2019–2023) researching global production value chains in CCIs
- ELIIT 2020 EU-funded project partnerships between textile, clothing, leather and footwear sectors and technology owners/providers
- C-Voucher (2018–2021) combining design and technology for a circular economy approach for companies from traditional industries (e.g. Agro-Food, Health, Sea, Textile, and Manufacturing)
- Creative Traditional Companies Cooperation CTCC (2017–2020) improving the innovation performance of 200 Danish, German, Polish, Lithuanian and Swedish small and medium-sized enterprises (SMEs)



- Solutions for the Integration of Art into Construction Projects (2018–2020) developing tools for municipalities and networking creative professionals and the construction sector
- Cult-CreaTE Project (2018–2022) exploring the potential of CCIs in developing new Cultural and Creative Tourism products and services
- Foundation (2019–2023) building regional resilience for industrial structural changes through the development of policies and measures to promote strategic entrepreneurial discovery processes and associated support
- ILUCIDARE (2019–2021) promoting heritage-driven innovation
- COCO4CCI (2019–2022) building capacities for cross-sectoral cooperation in advanced manufacturing -AVM
- EDUCRO (2019–2022) focused on culture and tourism sectors employing new models of educational co-creation
- Kalitka (2019–2020) developing cross-border gastronomic tourism linking cross-border enterprises on the basis of cultural heritage in the national cuisine.
- Augmented Urbans (2018–2020) exploring sustainable urban development around the Baltic Sea resulting in five integrated urban plans.

The multitude of these cases demonstrates a high level of awareness in the ND countries that traditional industries can innovate through cross-sectoral collaboration. Each of the initiatives engages a diversity of organisations and secures the involvement of the local ecosystem and policy stakeholders.

Sixteen out of the 46 cases innovating traditional practices are private and independent initiatives successfully thriving because of a versatile cross-sectoral approach to the business model. Among the examples is the family entertainment centre, PROTO Invention Factory, a large-scale Virtual Reality centre in Tallinn, Estonia. Its primary business is based on a cultural offer centred on inventions and scientific discoveries, the unique selling point being that all exhibits are prototypes. Unlike 'traditional' museum institutions, the business concept is embedded in a larger vision including other services: space to rent, catering services etc. This allows for a mixed revenue stream and a less rigid approach to managing change such as the challenge of COVID-19.

Similarly, the Artisan's Journey Accelerator programme across Russian regions was successfully piloted online in 2020 and profited from the decentralised mode of operation inherent to the Altourism agency.

A visible fact is that artists, designers, architects and more generally CCI professionals play a vital role in initiating innovation in traditional industries (ITI activities). An example is the Grasslands' Project CHAIR which gathers furniture craftsmen, artists, designers, architects and citizens in an experimental attempt to rethink and upcycle¹¹ chairs/furniture in a municipality in central Jutland, Denmark that formerly had a 'traditional' industry cluster. The large partnership of multi-sectoral stakeholders credits its success to a strong communication approach involving local people and the municipality and to showcasing the innovation project at design centres around the world.

Among the business cases with an innovative approach involving other sectors is Tsuru Robotics from the Russian Federation. It has grown to become an international R&D company working in the area of deep tech full-stack

11

The term denotes recycling (something) in such a way that the resulting product is of a higher value than the original item.

robotics and drone development. It is operating in Russia, Italy and soon in Latvia. Its experimental cross-sectoral collaborations provide solutions to artistic creations as well as to the medical, construction and other sectors.

Lager11 in Trondheim Norway seeks to innovate a 'traditionally very industrial and non-creative' region via several artist-led initiatives. Start-up companies and new businesses such as ONSTAGE APP in Poland and Genki Instruments from Iceland are innovating the music industry in ways that benefit the audience, public institutions, creators and the music market. One more example is Ornamika, an independent project at the junction of culture and digital technology. It archives, reconstructs, and interprets traditional crafts/folklore ornaments from different regions of the Russian Federation. Its services are valuable to museums, to private clients and to the public as well as for artists and designers working on its assignments who improve their professional standing.

Another feature of initiatives that innovate traditional industries is the importance placed on working in the field of tangible and intangible heritage. The common aim is to preserve traditional knowledge and culture and developing new services and business opportunities. The ND focus on sustainability is nothing new to the specialists in the area and European partners find in Finland, Norway and Iceland in particular a relevant basis for collaboration. One example is the HORIZON 2020-funded FISHSKIN (2019–2023) partnership. It aims to increase the marketability of fish leather on an industrial scale by integrating knowledge from different disciplines, such as fashion design, material science and marine biology. In this way, a new collective knowledge is formed and academic and industrial experts can develop new techniques and methodologies.

Not of least importance, activities related to the Innovating Traditional Initiatives domain often focus on education, training and the promotion of innovation competences and awareness. They address CCI professionals and organisations, for instance in the case of the Creative Entrepreneurship Academy working in different Estonian regions. TeamLab in Estonia has used cross-sectoral, interdisciplinary hackathons for sectors such as design, engineering, IT, e-Governance and more. In Lithuania, the Vilnius Gediminas technical university (VILNIUS TECH) Creativity and innovation centre "LinkMenų fabrikas", runs a MAKEADEMY. This is a three-month programme for the 'creators of the future'. Participants use creativity and innovation to make new hardware products. The RaPaPro educational/business initiative involves secondary vocational cultural education schools and underpins creative partnership formulas in Latvia. The 657 Oslo co-working space in Norway strengthens entrepreneur environments and CCI hubs across the whole country and also ran a Creative Tech Hunt in 2020. Similarly, the ArtLab, operated by the Danish Musicians Union and Danish Actors association and the association Užupis Creative Cluster in Lithuania are both addressing R&D and innovation activities for CCI organisations and professionals.

Innovating existing industries is also a key focus of organisations such as Skola 6 Design laboratory in Cesis, Latvia and of festivals such as the DesignMarch in Iceland which incorporates DesignTalks, DesignDiplomacy and DesignMatch. Urban Boost developed by Oulu Urban Culture is focusing on employment solutions and active participation of 18 to 29-year-olds as it runs a Culture Workshop for fresh urban culture endeavours and a Culture Lab.

Training for micro-businesses and SMEs and dialogue with public policy stakeholders on new concepts and new industrial trends are found in all the examples of international initiatives backed by European funding listed above. In order to raise awareness among different generations and groups, Innovating Traditional Industries initiatives also underline the value of awards. One example targeting the young generations is the Golden Cubes Award organised by the Architecture and Children Work Program, on behalf of the International Union of Architects of Poland. Another example addressing the professional public from different sectors is the national award scheme Bundespreis Ecodesign targeting professionals specialised in environmental issues and in design questions. Over the years, it has served to demonstrate by concrete examples the potential impact of such activities and led to the EcoDesign Circle project discussed above.

CHALLENGES AND SOLUTIONS

Several common challenges related to cross-sectoral innovation practices in the Innovating Traditional Industries domain and identifying the solutions.

CHALLENGE	SOLUTION
Securing the interest and participation from funders, companies, public, consumers.	Even though virtual meetings and collaborations are becoming 'the norm', the initial physical presence meetings are helpful to establish trust and understanding at the outset of both international and local processes. Raising awareness and special focus on establishing personal contacts with stake-holders is a key. The marketing activities are also vital.
2. Raising money for an experimental project going across sectors.	It is very important to have a strong, broad network and gifted, recognised professionals to back the innovation initiative. Involving the local authorities at an early stage is an example of best practice. It is also important to plan time to communicate and disseminate results.
3. Boosting creative entrepreneurship and raising competences within traditional CCI entities and among professionals from other industries.	Developing educational programmes and international events facilitate this. Finding the 'perfect' moment for training offers is important in order to convince local businesses of the usefulness of collaboration as well as to establish personal contacts to reach them.
4. Funding for cross-sectoral collaboration and support for creative SME or independent initiative taking the risk of innovating industries.	Cross-border cooperation via knowledge-sharing on the value of CCIs and matchmaking different sectors and disciplines serves well to address new needs. A cross-sectoral innovation programme offering support for improving services may accelerate developments on the ground. Special funds can catalyse the preparatory phase of collaborative processes.
5. Overcoming language barriers in learning and knowledge transfer processes.	Iteration creates understanding and leads to innovation, so the exchange of knowledge with the local and international communities inspires a sustainable future for collaboration. Networks are of prime importance to create structures to build upon, to reach like-minded peers / actors and thus to sustain, further develop and spread results.
6. Developing a small project team and finding more funding to scale the initiative to its full potential to cover more territories and develop a more advanced technology.	Interdisciplinary collaboration tackling a challenge from different angles leads to "more robust" solutions. Exploring private investment and creating new projects as well as seeking new opportunities means proactively initiating potential partnerships. The presence of a cross-innovation fund is an incentive for the micro-companies to dedicate time to risk-taking work.

IMPACT ANALYSIS / DEVELOPMENTS

The monitoring of impact, use of indicators and constant communication both within a partnership and also towards stakeholders at large is considered of primary importance by all cases in the Innovating Traditional Industries domain. An example of best practice is from the start to devise monitoring and evaluation mechanisms, checklists and indicators to capture the expected impact.

- For instance, by May 2020 EcoDesign Circle had seven new products and services (prototypes) developed in the following fields: construction, packaging, outdoor and indoor furniture, food, clothing and camping equipment. Further indicators of success included a high number of trained experts and connections established to other initiatives, projects and actors working in the region.
- Online databases linked to award schemes have proven their successful and are likely to evolve as instruments monitoring the impact of industry innovation and learning programmes. Personal testimonials and group evaluation are also valuable tools for capturing impact.
- Dissemination and communication activities serve their role in tracking the interest for future activities. Since the autumn of 2020 Ornamika runs a daily program at Radio Culture, reaching 800,000 listeners every week. As a result of this impact it was selected as one of the top three cultural projects of Russia at the 2020 Moscow Urban Forum.
- The experience of support received from innovation programmes, which also measure impact, can assist in monitoring progress in the Innovating Traditional Industries domain. For instance, in the Russian Federation the Bortnik and Skolkovo Foundations backed the risk-taking efforts of Tzuru Robotics. Innovation vouchers or culture vouchers may be a good tool to implement and monitor cross-sectoral innovation in many different sectors.
- Educating successor generations, the online educational platforms and databases associated with them, are a key legacy of many initiatives in the innovating traditional industries domain.

The well-being agenda crossing sectoral and disciplinary boundaries

Thirty-two of the mapped 121 cases, (26% of the total), address cross-sectoral **collaboration for innovation related** to the well-being agenda.

From the outset of the mapping process, data collected suggested that not only the concepts but also the practices interlinking well-being and innovation are multifaceted. They address individual and communal well-being (e.g. health, vulnerable groups, public space) as well as business practices linked to circular, sustainable and green economy that directly involve the consumers and public. Post-pandemic agendas will only intensify the focus on well-being, something already visibly present in the ND countries.

BACKGROUND AND SPECIFIC INITIATIVES

The involvement of artists, designers, architects is very prominent in all well-being cross-sectoral cases mapped in this domain. The internationally-renowned Icelandic artist Olafur Eliasson and engineer Frederik Ottesen launched the Little Sun social business in 2012. It seeks to bring clean, reliable, affordable energy to the 1.1 billion people in the world living without electricity. It is now collaborating with IKEA, with the objective to inspire and explore new ways of harnessing the power of the sun through intelligent design whilst raising awareness of the global need for energy access for all.

At a more local ND level, the Kunstpartiet (The Art Party) umbrella initiative started as a community-based project in the Jutland region of Denmark. Its dual focus was on improving the quality of life of individuals and on initiating cooperation between local institutions for the common good. Starting locally and gradually scaling up the activities has gained Kunstpartiet a strong reputation. For example, the Art on Call healthcare project started in the municipality of Holstebro in 2019 and it addressed 11 000 households using a converted ambulance to delivering citizens an art treat. The feedback from the public being highly positive, seven different municipalities of the Central Denmark region were later re-connected within the framework of a regional festival. In 2021, the arts company DOO is moving to Billund (the city of LEGO) which houses the second busiest airport of Denmark. This will allow it to start work on a new project, The Flying Theatre.

Artists already engage with the well-being agenda, therefore the concern of academic institutions in the ND region is to innovate training provision. Where art therapy programmes exist, they do not address working with disadvantaged and vulnerable groups in order to facilitate well-being, empowerment and social inclusion. The initiative Social inclusion and Well-being through the Arts and Interdisciplinary Practices -SWAIP (2018–2020) lead by Iceland University of Arts programme develops a learning programme where artists can train in a cross-art and cross-sectoral learning space, supported by the ERASMUS+ EU programme. Another initiative, Cre-health (2018) in Sweden reached a proof of concept by testing in practice the impact of culture and creative activities on a participating group of unemployed people and people on sick-leave. There was a positive contribution as a result, many of them were able upon completion to integrate back into employment and society.

Related to the topic of professionalisation and recognition for artistic services in a cross-sectoral well-being practice is a project in which eight European Healthcare Clowning organisations collaborate. Clowning Connects Us – ClowNexus (2020–2023) is supported by the Creative Europe programme of the EU. Organisations from geographically diverse backgrounds - Austria, Croatia, Finland, Hungary, Lithuania, Netherlands and Spain exchange know-how and collaborate artistically in the interest of elderly with dementia and children and teenagers with autism spectrum disorder. Additionally, they develop policy guidelines as some are members of the European Federation of Hospital Clown Organizations (efhco). Another example is the artistic residencies in the context of closed-type social or medical care institutions. The Well-being Residency Network started as an international capacity building project (2018 - ongoing) investigating the practices of well-being residencies in Finland, Russia, Latvia, and Sweden. The practices are successful even in the contexts of 'socially distant' cultural experiences in 2020. For example, the artist Vita Malahova in Latvia (in the framework of the Sansusī Well-being residency programme) has managed to create artworks together with the clients using phone communication in the research phase and voice reproducing devices for individual experiences of the art piece. This places the resident in the position of an actor/performer of a one hour-long performance inspired by the stories of the people. Impacts of all these initiatives are discussed further below.

Resilience, tackling climate change, the balance of urban-rural development and safeguarding heritage are well-being priorities addressed by several cases. They take a cross-sectoral approach to involving local actors of all types in innovative ways for the better social and economic good. These include:

- The Culture Adaptations (2018–2021) in Sweden exploring adaptation to climate change. One activity involves an arts intervention designing and building a common green space.
- The Leaking monument (2018–2021), also in Sweden, utilised a public art proposal to channel an existing undercurrent water flow into a 'river dance' that solves a public space problem and simultaneously educates children and the general public.
- Well-being and intangible cultural heritage were at the core of The Nordic Safeguarding Practices initiative (2017–2020) which advances the concept and practice of what safeguarding means in the cultural context. The website developed by the project addresses multiple stakeholders using over 70 examples.
- The Cultural Paths: Crafting regenerative visions in the rural north, (2020–2021) addresses sustainable development in northern Finland, Sweden, Norway, Russia and Iceland. Among the tools to achieve this are a rural residency in a hosting partner location and a co-development workshop and fieldwork for the development of products and services in the area of crafts, arts and local heritage linked to alternative tourism schemes.
- The destination design of the Austurland project (2014–2018) in Iceland already co-designed a 'tourist offer' in an open and inclusive way. As a result, the revenue from tourism has increased by a growing number of guest-nights, primarily depending on longer stays by visitors and higher occupancy rates. The involvement of local people and businesses in the co-creation of a more varied cultural offer and the local-to-local link was strong already prior the pandemic crisis. It is expected that it will form part of the resilience of the local context in times of crisis.
- Local heritage, communities and young people are tied together in the innovative activities of The Game of Gdansk project implemented under Urb Cultural Planning (2019–2021) Interreg Baltic Sea Region funded initiative.

There are also businesses which cradle a well-being focus. Among them the case of the Finnish company Lovia (founded 2014) stands out. It creates fashion accessories (bags, jewellery) relying only on upcycling existing (excess) materials and its image is built around full transparency of the origin and the entire value-chain of the production. Each item has a unique 'DNA' code linking the client and the Lovia community. A very advanced digital story-telling focus, wide focus online marketing and extensive care for each sold item is the reason the company's sales tripled over the last two years and continue to grow. Another example is the the Blue Bank service and innovation center in Þingeyri, a small fishing community in the Vest Fjords of Iceland. It provides banking services as well as connection with the Ísafjarðarbær municipality and the Westfjords Workers Union, Verk Vest while it offers facilities for cooperation, reading and creative work. The MossTree project, cleaning and cooling air in public or closed spaces using natural means, was developed by a German start-up company and awarded business innovation support from the European Union's Horizon 2020 programme. One more notable start-up is Endel, founded in 2018. It includes programmers, musicians, artists and designers from the Russian Federation and Germany. It is working on a music well-being technology that is rapidly gaining global acclaim. The product, based on scientific theory, music and advanced AI data, underlines the relevance of current research initiatives in well-being.

A long-term research programme "Humans making music – culture and heritage in interaction" is led by Karolinska Institutet in Sweden. It studies the interaction between heritage and environment to reveal the connection between musical engagement and physical and psychological health. "Kultur, Hesse og omsorg" is a national resource centre for research and use of culture and art (especially music) within the health sector in Norway. The Estonian experiment within The Human Cities _Challenging the City Scale (2014–2018) international platform related to the Jazz Festival Juujääb. The partners engaged in interdisciplinary exchanges, supported by the Creative Europe EU programme and explored how the inhabitants (re)invent the constantly evolving contemporary city through experiments in the urban space in different contexts.

Well-being and music are also central to a case provided by Startup Mannheim in Germany. It relates to a cross-innovation pilot involving medical technology and the music industry clusters. The interdisciplinary working group of the pilot tested a new technology for brain tumour operations utilising an in-ear monitoring system device that allows the patients to listen to music and to hear the voice of just one of the medical team during an operation in full consciousness. The function facilitates monitoring the status of the language centre of the brain and allows surgeons to communicate without patients hearing them. The expected new products and patents are based on a different work process/method, and a proof of concept tested during the project.

Last but of high importance, the music industry is in focus in the only case mapped that specifically highlights gender balance as an aspect of well-being in both CCI economic and social innovation. Keychange (2019–2023) has a four-year programme supported by the Creative Europe programme of the EU to further the work of a global network and movement working towards a total restructure of the music industry in reaching full gender equality. With that focus, which is likely to be present in more cases across the ND region, the United Nations SDG (sustainable development goals)¹² definition of well-being is fully present in the cross-sectoral well-being initiatives involving the ND countries.

CHALLENGES AND SOLUTIONS

The most prominent common challenges related to the well-being cross-sectoral innovation practices and proposed solutions are presented below.

CHALLENGE	SOLUTION
Professionals of different sectors need to enter into dialogue that is normally blocked by stereotypes highlighting differences.	Tight moderation by the mediator organisation/ team is the key to this process.
Practices positioned between sectoral policies (not recognised as art, not recognised as health) point to the need to promote the role of artists working in the well-being domain. Involving a private sector partner ready for cross-sectoral innovation processes.	The initiatives engage with impact assessment, qualitative feedback, and use demonstration of innovative solutions. Curricula and professionalisation platforms are developed to establish the innovative crosssectoral expertise.
3. Funding for well-being inter-sectoral innovation not available. Finding artists competent in creative processes as well as in another sector's practices and able to navigate and inspire the conversation.	A best practice is for the mediator (CCI) organisation to start dialogue and use resources available at different organisations in order to pilot activities. The success is aligning the different sectors so they recognise the expertise from the other field.
4. Effort to get everyone (community and micro companies, the local authorities) onboard and committed, increase people's understanding of the process and their becoming part of the movement.	Those issues are best addressed by CCI mediators constantly being visible and present in meetings, sharing the process all the way through. Improving knowledge and modes of working in virtual and digital means.
5. Sustainability of the cross-sectoral output integrating an artistic vision in view of long-term maintenance.	To establish the legacy of an arts-led intervention a post-project action plan needs to be delivered and integrated into the operations of the company maintaining it.

IMPACT ANALYSIS / DEVELOPMENTS

The long-term development and sustainability of well-being initiatives is the core reason for most of them to take impact assessment very seriously. This is done for economic as well as social reasons. Artist-led initiatives such as The Clowning Connects Us – ClowNexus exist also for reasons of developing methodologies for monitoring and evaluation tools in order to provide evidence of the impact and to develop policy tools for future support. The leading partner phrased a common concern that the art world does not consider these practices art while the health sector does not recognise them as suitable for public funding.

Of another origin but also very dependent on monitoring effects are the six business initiatives in this sub-domain. They are either social business or start-ups with a very clear focus on transforming their consumer into a 'breathing' well-being community.

In the cross-innovation cases involving medical/health organizations or institutions, research on patients and medical staff is applied. Proof of concept is another tool to monitor the results of arts-based practices on the change in individual perceptions of well-being and socio-economic integration case by case.

Public art projects and public-funded collaborations utilise surveys and evaluation by partners and the municipalities. Intangible impacts such as the perception of quality in life, inclusion, arts participation, the visibility of groups in vulnerable positions are essential to these initiatives too. Thus, defining indicators and carrying out internal or external assessment is a very prominent feature for them in order to assess the impact on the well-being of individuals and of the wider community.

When it comes to design and architect-led activities, the impact on the wide public is easier to capture in numbers as they operate via festivals, exhibitions etc. The Human Cities _Challenging the City Scale international platform, for instance, in four years reached more than 70,000 visitors and participants. Its cultural activities involved nearly 1,000 designers, architects, artists, 800 design and architecture students.

Economic impact is central and being tracked by tourism-related well-being cases such as the destination design of Austurland (East Iceland). It demonstrates the development of local products within tourism experiences, food, handicrafts and overall increased turnover but also has captured intangible impact reflected by a sense of pride amongst the local community.

Increasingly prevalent are the digital means to communicate, sell or interact with the public in the creation or sustaining of well-being initiatives. They are vitally important for all CCI organisations.



Image 7: Trash bag, Lovia, © Lovia

Key findings

The mapping process sought to identify the degree of cross-sectoral innovation currently taking place between the cultural and creative industries (CCIs) and other social and economic sectors in the ND region.

Benefiting from its digital manner of operation and tight team work supported by the NDPC, the activities of the project were intricately interwoven in terms of flow of information, expert contribution, including Experts' Focus Groups and policy briefs carrying valuable proposals. 13 This chapter focuses on the findings drawn from the mapped cases though they largely resonate with recommendations made by other project outputs.

The obvious conclusion is that there is a high degree of CCI innovation awareness and a variety of initiatives at different phases of development in the eleven countries led by diverse stakeholders.

CORE STAKEHOLDERS

In the words of Olafur Eliasson, artist and co-founder of the LittleSun project,, ".... Culture has become a significant player in stabilizing societies ... and also as an economic force we should stop thinking of the culture sector as on the periphery of the societal substance."14 The cases mapped as a background for this report support this conclusion. CCI organizations of all types initiate or partake in collaboration for innovation with other sectors: public funded organizations, public-private partnerships, private companies as well as not-for-profit or social business organisations and artist-led initiatives.



It is quite evident that countries with specific CCI innovation support such as Finland, Sweden and Germany are the source of several advanced cross-sectoral initiatives. At the same time evidence suggests one needs to take account of the private investment that independent organisations, artist-led communities or mixed sector initiatives and businesses are making.



There is already demand for CCIs to collaborate on innovation processes on the part of (mostly larger) businesses. At the moment this interest is manifested as a reaction to the work of mediators bridging the 'sectoral/language/conceptual' divide. These initiatives will grow in case suitable forms of support are planned and made accessible.



Diverse stakeholders are crossing sectoral boundaries and developing new products, innovative business models and services also in countries where funding for CCI/cross-sectoral innovation is not yet in place or seriously limited. Many of these start-up companies need further support in order to grow and become sustainable not only for their own existence but also for the activities which

Detailed information can be found in the web-resource of the project which presents fifteen stories of cross-sectoral innovation elaborated with the goal to inspire more organizations as well as policy makers. ndpccrossinno.eu

See Gestsdóttir F. 2020. Little Sun's social business brings clean, reliable, affordable energy to the 1.1 billion people in the world living without electricity while raising awareness for energy access and climate action worldwide.

they realise in partnership with other stakeholders from various sectors.



The role of artists and CCIs in cross-innovation initiatives has been indicated as vital by authors stating that cooperation between traditional and creative business is hindered by lack of information and prevailing prejudices and stereotypes. (Kublickiene 2020) The mapped cases support this fact and the related recommendation that examples of good practice would alleviate some of them.

INNOVATION IMPACT PER DOMAIN

Competences and professional inputs of CCI organisations are essential in all three domains of cross-sectoral innovation. There is also a specific innovation impact that defines the respective cross-sectoral terrain of collaboration. In the domain of 'connectivity' for innovation the impact is strongly associated with innovations solving a unique (business) problem. The second domain addresses a context that alters the value chain in ways that shift the way 'traditional' businesses operate and has the potential to affect similar entities and relevant stakeholders. The well-being domain demonstrates its impact on launching new types of businesses and services that depart from the CCI base of competences.

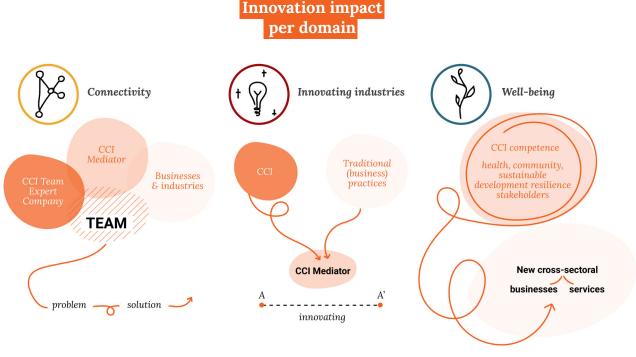


Image 8: Innovation impact per domain (nonexclusive typology)

THE CROSS-SECTORAL INNOVATION PROCESS

What all the three cross-sectoral domain cases have in common is that from the innovation point of view, the dichotomy of old/new industries is made redundant. The process of seeking viable solutions that serve the economy (service providers or producers) or solutions that address the community (consumers, end-users, public) bears common traits.

CCI Ecosystem

Cross-sectoral innovation process

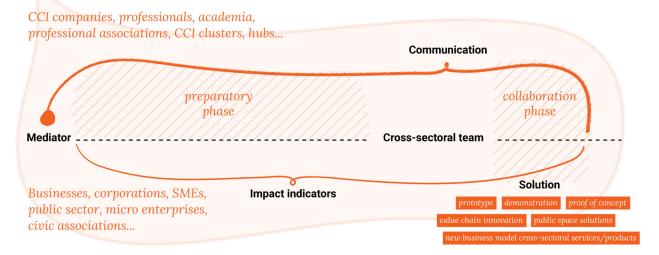


Image 9: CCI collaboration for innovation, a cross-sectoral innovation process general model

The image above illustrates that cross-sectoral innovation initiatives in the three domains typically result from a process of collaboration via establishing a cross-sectoral team.

Another shared trait is that the preparatory phase demands considerable attention and resources which are crucial for the success of any cross-innovation initiative.

Three fundamental activities complement this model. They are the role of a CCI mediator, impact indicators being developed and intensive communication activities that all begin at the start of the preparatory phase.

SEVEN TRENDS FOR POLICY CONSIDERATION

The preceding chapters provided more specific references on types of challenges faced in the respective domain: cross-sectoral connectivity, industry innovation, CCI innovation related to well-being. Solutions have been found and/ or are proposed by case study contributors for policy consideration.

There are seven trends that are worth considering when elaborating specific policies.



Connectivity as a key for the preparatory phase of cross-sectoral innovation teamwork

Support from public funds has significantly advanced one domain in which local CCI actors build an ecosystem to embark on the cross-innovation terrain. The fact that the Innovating Traditional Industries domain utilizes most EU/local funds means that the programmes in the period leading up to 2020 fulfilled the purpose of stimulating closer cooperation on seeking solutions and establishing a broader networked approach in the partnerships. The new priority should focus more closely on connectivity among specific entities and establishing cross-sectoral innovation teams. Support should address new business entities that further an innovative solution into a business model and underpin those in the role of mediators (artistic initiatives or CCI organisations) that build those structures and boost the interest in addressing the initial (high risk) phase of innovation processes.

Instead of proposing short-cut solutions, the experts suggested that voucher schemes are a good second step that may stimulate any sector to embark on innovation involving CCIs. The foundation for this is long-term structural funding to ground cross-sectoral collaboration efforts.

2. Knowledge-sharing on CCIs' roles as mediators or initiators of cross-sectoral innovation

Often it is artists and designers who, as creative professionals, address in new ways crucial aspects of the creative process and stimulate sustainability. They revisit the local-to-local value chain in which manufacturing or services are more ecological or involve more local business while also cultivating high public awareness of the value creation. This study has demonstrated the impact of addressing new challenges such as sustainable design and circular economy at broader ND region or European level. The importance of knowledge-sharing is coupled with expertise that can serve to enhance and promote the key role of CCI organisations acting as mediators and initiators of cross-sectoral innovation in all three domains.

Multilevel approaches to innovation risks taken by diverse partners

It is possible that private enterprises are more prone to risk-taking in contexts where funding by local or governmental organizations is more difficult to obtain. Yet, primary source information from all 11 countries suggests that inter-sectoral innovation is a risk best shared by diverse partners because it crosses boundaries in a context that inherently demands close communication among various actors. The case study contributors repeatedly indicated how essential are examples which inspire and demonstrate the huge potential of cross-sectoral innovation practices. In the coming period more successful business models (for profit or not-for-profit) should be mapped to use as best practice examples.

Broader definition of CCI innovation and its impact

The pertinent point is that there are innovations developed with CCI involvement, sometimes referred to as 'soft technology' innovations, that transform roles and value chains in growth factors. Innovation is essential to solving broader domain challenges linked to sustainable forms of production, consumption and living and to well-being on a personal and communal level. The alignment of different types of expertise across sectors as well as cross-domain professionalisation is important for both business and public sector products/services.

5. Attention to long assessment of impact and tracking results

In addition to effective networking being a crucial factor, all 'success story' cases underline the importance of communication and the use of monitoring, checklists and indicators to understand, test and demonstrate the benefits of an initiative from the start. It is clear that to achieve and measure the innovation impact, all cross-sectoral initiatives need to define indicators and secure sufficient resources to implement both digital as well as more traditional forms of monitoring impact and tracking results. A special effort needs to be made in improving methodologies to assess impact.

Broader vision of sustainable development goals (SDG)

Innovating the provision of services and new products that address individual, social and communal well-being is highly important to ND region countries. It is influencing a broader vision of sustainable development goals (SDG) involving new skills, new research and professional training. It is evident that research grants and R&D support underpin many initiatives in the area of innovating traditional industries and fewer in the well-being domain, which is not yet recognized as working across sectoral boundaries. This rationale is clearly out of sync with the impact and importance it has on UN Sustainable Development Goals values widely shared across the initiatives.

Examples testify that integrating R&D and scientific input from various disciplines or sectors is at the core of the innovative solutions of new businesses. The second phase of scaling up efforts is therefore important also for enterprises that may not fit into one specific form of sector-base provision.

$\overline{\mathbb{Z}}_{\circ}$ Legal frameworks facilitating CCIs' involvement in cross-sectoral innovation

Across the eleven countries cross-sectoral innovation is found to build ecosystems and shared values rather than divide organisations into severe competitors thriving on market espionage. One of the reasons is that the processes setting the scene for those collaborations demand considerable time. In many ways, they rely on open-innovation where many contributors/many users connect. Still, specific IP and market-demand factors remain an important consideration for the way legal frameworks acknowledge the contribution, renumeration and economic assets for CCI and other industries partaking in a collaboration for innovation. This is in line with the clear trend of accelerated transformations re-defining the CCI field that will intensify in the next decade.



Image 10: Ornamika, Photo © Ornamika

References and resources used

- Bertschek I. (et al.), 2018 Cultural and Creative Industries Monitoring Report Centre for European Economic Research (ZEW)
 Mannheim, 2018
 Mannheim, 2018
 - $www.bmwi.de/Redaktion/EN/Publikationen/Wirtschaft/monitoring-report-cultural-and-creative-industries-2018.html \\ [accessed Nov 2, 2020]$
- 2. Heliste P., Kupi O., Kosonen R., 11 Dimensions: Trends and Challenges in Cultural and Creative Industry Policy Development within the Northern Dimension area, Aalto University School of Business, Center for Markets in Transition, 2015
- Laaser U., Weber W. and Staines J. Mid-term Evaluation of the Northern Dimension Partnership on Public Health and Social Well-being and Northern Dimension Partnership on Culture, Final Report RfS 2018/401257/1 September 2019
- 4. McNeilly N. Twelve trends in the Russian creative industries, Arty Generation, 29 September 2020.

 www.artygeneration.com/home/2020/9/28/twelve-trends-in-the-russian-creative-industries [last accessed Nov 5, 2020]
- Tarjanne,P. Luovan talouden tiekartta [Roadmap for the creative economy] Ministry of Employment and the Economy, 2020 urn.fi/URN:ISBN:978-952-327-568-3 [last accessed Nov 9, 2020]
- THE CONTRIBUTION OF THE HIGH-END CULTURAL AND CREATIVE SECTORS TO THE EUROPEAN ECONOMY, The European Cultural and Creative Industries Alliance, 2020 www.eccia.eu/assets/activities/files/ECCIA%20Policy%20Recommendations.pdf [last accessed Nov 5, 2020]
- CrossInnovation Project, INTERREG IVC Programme, INTERNATIONALISATION CASE STUDYREPORT, 2014, www.cross-innovation.eu/about/ [last accessed Nov 22, 2020]
- 8. Gestsdóttir F. 'IT'S MORE ABOUT THE PRINCIPLE Olafur Eliasson', Icelandic Design and Architecture, May 25th, 2020 www.honnunarmidstod.is/en/ha-frettir/its-more-about-the-principle-olafur-eliasson [last accessed Nov 5, 2020]
- 9. Impulse paper on the role of cultural and creative sectors in innovating European industry, Luxembourg: Publications Office of the European Union, 2019
- KEA & PPMI, Research for CULT Committee Culture and creative sectors in the European Union key future developments, challenges and opportunities, European Parliament, Policy Department for Structural and Cohesion Policies, Brussels, 2019
- Dubravka Jurišić, Barbara Stacher and Wanda Poitschke (eds) CCS ECOSYSTEMS FLIPPING THE ODDS Financing, Innovation, Entrepreneurship and wider Ecosystem support for Cultural and Creative Sectors, LaVallée Creative Hub Molenbeek, Brussels, 2020
- ILO Sectoral Brief, COVID-19 and the media and culture sector, 2020, www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/briefingnote/wcms_750548.pdf [last accessed Jan 5, 2021]
- 13. The ELIIT Project announces its first 15 selected partnerships, 30/06/2020, ec.europa.eu/growth/content/eliit-project-announces-its-first-15-selected-partnerships_en [last accessed Nov 5, 2020]
- Sebastian Shehadi, Alex Irwin-Hunt Intelligent urbanism: is holistic approach key to smart city success? FTI, April 16, 2020, www.fdiintelligence.com/article/77206 [last accessed Nov 5, 2020]
- Startup Wise Guys & EIT Digital, BALTIC STARTUP SCENE Report 2019, startupwiseguys.com/report/ [last accessed Nov 7, 2020]
- Weber K, Duarte T. CCI POLICIES ON EUROPEAN LEVEL, InduCCI, 2019, www.interreg-central.eu/Content.Node/InduCCI/Policies-On-European-Level.pdf [last accessed Nov 5, 2020]
- Kublickiene C, L.TCC CREATIVE TRADITIONAL COMPANIES COOPERATION, mapping creative-traditional companies cooperaton for innovation in Lithuania. MOVECREATIVEEU South Baltic Programme 2014–2020(ERDF), movecreative.eu/wp-content/uploads/2020/01/CTCC_3.10_STUDY-CI-TB-_EN.pdf [accessed July 31, 2020]
- 18. THE "TURNING INNOVATION INTO COMPETITIVENESS AND SUSTAINABLE GROWTH" REPORT, Business Finland, NEWS 18.06.2020 www.businessfinland.fi/en/whats-new/news/2020/the-turning-innovation-into-competitiveness-and-sustain-able-growth-report-opens-up-possibilities-for-economic-growth/#597596e2 [accessed July 31, 2020]
- 19. The importance of design and architecture when shaping tomorrow's societies, Iceland Design and Architecture June 24, 2020 www.honnunarmidstod.is/en/ha-frettir/the-importance-of-design-and-architecture-when-shaping-tomorrows-societies [accessed July 22, 2020]

CONTRIBUTORS

The project team is grateful for the contributions to the Study generously provided by:

Ada Aadeli, Lovia, FI; Aistė Ulubey, Artscape, LT; Algirdas Orantas, Lithuanian Design Council, LT; Andris Izinkēvičs, Riga City Council, LV; Anine Willums Karp, Head of Community and Growth, 657 Oslo AS, NO; Antonia Blau and Alexandra Resch, Goethe Insitute, DE; Anu-Katriina Perttunen, Creative Finland, FI; Berglind Hallgrímsdóttir and Arna Lára Jónsdóttir, Innovation Center Iceland, IS; Björn Berg Marklund, Lecturer in informatics, University of Skovde, SE; Burak Sayin, Trans Europe Halles network, SE; Carmen Valero, RED NOSES Clowndoctors International, AU; Charles Bušmanis, Designer, Design thinking expert, LV; Conrad Dorer, German Environment Agency, EcoDesign Circle, DE; Daniel Byström, Design Nation, SE; Denis Pyzhikov, KRICPE of Petrozavodsk State University, RU; Dita Danosa, Latvian Design Centre, LV; Donna Hill, Senior Program Officer, Office of the Director, Department for Transition and Developed Countries (TDC), World Intellectual Property Organization (WIPO), Switzerland; Ekaterina Sachkova, creativeindustries.ru, RU; Egils Grasmanis, Board Games publisher Brain Games, LV; Egle Baltranaité, Klaipeda University, LT; Egle Girdzijauskaitė, Creative Project Manager, Vilnius Gediminas Technical University - Vilnius Tech, LT; Ekaterina Cherkes-Zade, Universal University, RU; Elena Golubeva, Nordic Council of Ministers St Petersburg office, RU; Elena Khoroshkina, Artecon, RU; Elena Zelentsova, Skolkovo Foundation, RU; Elisa Palomino, Senior Lecturer BA Fashion Print, Central Saint Martins, University of the Arts, UK; Emilia Cholewicka, Creative Economy Research Center, University of Social Sciences and Humanities, PL; Eva Leemet, CEO, Creative Estonia, EST; Fiona Dahncke, Cross Innovation Hub, Hamburg Kreativ Gesellschaft, DE; Georgy Nikich, art historian, lecturer at the Moscow School of Social and Economic Sciences, RU; Gert-Jan Stamgert, taat-projects.com, DE; Gouzel Nezhmetdinova, Head of International Affairs Department of Kazan State Power Engineering University, RU; Guna Datava, Institute for Environmental Solutions, LV; Halldora Arnardottir, SWAIP project, IS; Henryk Stawicki, Change Pilots, PL; Ilmari Huttu-Hiltunen, TUNI, FI; Ina Ločmele, Ministry of Culture, LV; Ilze Gailite Holmberg, CREA.HOLM, LV; Irina Kizilova, Institute of Cultural Programs, RU; Jakub Fiebig, On Stage Application, PL; Jami Andersson, Boost Turku-Entrepreneurship society, FI; Jana Budkovskaja, Multimedia creative hub in Narvam EE; Janis Grinvalds, 3D artist, LV; Jari Jumpponen, Northern Dimension Business Council; Javier Rodriguez, Standart Thinking, EU; Jenny Kornmacher, Cross Innovation Hub, Hamburg Kreativ Gesellschaft, DE; Jonas Olsson, The Swedish Industrial Design Foundation, SE; Justine Pantelejeva, Riga City Development Department, LV; Justyna Turek, Change Pilots, PL; Karina Vissonova, Institute of advanced design studies, HU; Katerina Sharova, Arctic Art Institute, RU; Krista Petäjäjärvi, Arts Promotion Center Finland, FI; Lilita Sparāne, Creative industries and partnerships expert, LV; Roma Surviliene, National Association of Creative and Cultural Industries of Lithuania, LT; Kaarina Williams, Council of the Baltic Sea States; Kadri Haljas, Triumph Health, Health technology startup, EE; Katarzyna Domagalska, Narodowy Instytut Architektury i Urbanistyki, PL; Katarzyna Krawczyk, Art_Inkubator w Fabryce Sztuki, PL; Kati Fager, crazytown.fi, FI; Katia Zatuliveter, altourism.ru, RU; Katja Armbruckner, Kompetenzzentrum Kultur- und Kreativwirtschaft des Bundes, DE; Kerstin Schütt, Twisted Ramble Games, DE; Kristín Valsdóttir, Dean of Arts Education, Iceland University of the Arts, IS; Krystyna Wroblewska, expert on Baltic Sea cooperation and regional development, Gdansk, PL; Ksenia Diodorova, GONZO Design, St.-Petersburg, RU; Laetitia Barbu, Designer, FR; Lars Georg Fordal, The Norwegian Barents Secretariat, NO; Leena Janhila, Humak Creve Incubator for Creative Industry, FI; Leena Marsio, Finnish Heritage Agency, FI; Lene Noer, Foreningen GRASSLAND, DK; Linda Sugataghy and Giuseppe L. Bonifati, DOO performing arts group, DK; Linda Thomson, Senior Research Fellow, UCL Biosciences, Genetics, Evolution and Environment, UK; Lissa Holloway-Attaway, Division of Game Development at the University of Skövde, SE; Maciej Hofman, Policy Officer, Culture - Cultural and creative sectors, European Commission; Magdalena Zakrewska-Duda, Senior Specialist on Strategic Partnerships, The Baltic Sea Cultural Centre, PL; Magnus Aspli, Arts Council Norway; Malla Alatalo, Arts Promotion Centre Finland, FI; Mara Pavula, Riga Circus and The well-being residency network, LV; Maria Loleit, ornamika.ru, RU; Marina Lebedeva, Medina Art, RU; Marlene Johansson, Expression Umea, SE; Martin Larsson, Incubator Klump, Subtopia, SE; Mateusz Smól, Creative Economy Research Center, University of Social Sciences and Humanities, PL; Mathieu Vrijman, Kultivator Dyestad, SE; Matthias Rauch, cultural innovation officer, Next Mannheim, DE; Mieke Renders, Trans Europe Halles, SE; Monica Urian, Programme Manager, Directorate-General Education and Culture of the European Commission: Monika Tomczyk, University of Szczecin, PL: Nadezhda Gerasimova, otmetky.info, RU: Nana Heinberg, County of Dalarna, Dept of Culture and education, SE; Natasha Skult, Hive, Turku Game Hub, FI; Nikita Rodichenko, tsuru. su. RU: Olaf Gerlach-Hansen. Danish Cultural Institute. DK: Olaa Kizina. Creative Business Cup Russia. RU/DE: Paivi Karhunen. Northern Dimension Institute, FI; Päivi Viitaharju, Tampere University of Applied Sciencesm FI; Per Horn, Innovation Manager for EIT Health, European Institute of Innovation and Technology (EIT), DK; Per Stromback, Swedish Games Industry, SE; Piotr Hardt, architect, National Institute of Architecture and Urban Planning, PL; Ragnar Siil, Creativity Lab, EE; Ruth Lemmen, consultancy and co-founder of Womenize! Games and Tech, DE; Ruxandra Lupu, Design expert, EU; Sanna Rekola, Dance Info Finland; Soren V. Kjaer, Kreativ Facilitator and Innovationskonsulent, DK; Theresia Holmstedt Jensen, County of Dalarna, Department Culture and education, SE; Theresia Jensen, responsible for CCI and Culture and Health, County of Dalarna, SE; Tiago Prata and Johan Lundbladh, TILLT, SE; Timo Mäkelä, Sitra, Finnish Innovation Fund, Northern Dimension Council, FI; Tobias Staaby, teacher, advisor, researcher and author on games and learning, NO; Tomi Aho, Arts Promotion Centre, FI; Trine Richter, Green Solutions House, DK; Vaidotas Vaišis, Science and Research Office, Vilnius Gediminas Technical University, LT; Viktor Lindbäck, Enterprise Developer, Swedish National Heritage Board, SE.

The project was also supported by the NDPC Northern Dimension Partnership on Culture Steering Committee 2020:

Maija Lummepuro, Senior Ministerial Adviser, Ministry of Education and Culture; Leniitta Soini Billstam, Assistant Desk Officer Northern Dimension, Department for Russia, Eastern Europe and Central Asia of the Ministry for Foreign Ministry of Finland; Ida Josefine Fuglsang-Damgaard, Foreign Affairs Officer, Ministry of Culture of Denmark; Anu-Maaja Pallok, Adviser Creative Industries, Ministry of Culture, Estonia; Norbert Kürstgens, Cultural and Media relations with Scandinavia, the Baltic countries, Great Britain and Ireland, German Federal Foreign Office Germany; Karitas H. Gunnarsdóttir, Director, Department of Cultural Affairs, Ministry of Education, Science and Culture Iceland; Daiva Parulskienė, Head of the Department of Creative Sectors and International Culture Policy and Milda Vakarinaitė, Chief Specialist, Creative Sectors and International Culture Policy, Ministry of Culture, Lithuania; Lāsma Krastiņa Sidorenko, Head of the Department of Creative Industries and Zanda Jaunskunga, Department of Creative Industries, Ministry of Culture, Latvia; Sverre Miøen, Royal Ministry of Culture, Norway; Urszula Ślązak, Director of International Relations Department, Ministry of Culture and National Heritage; Agnieszka Grunwald, Deputy Director, Department of International Relations, Ministry of Culture and National Heritage and Anna Woźnicka, Department of International Relations, Ministry of Culture and National Heritage, Poland; Maria Sergienko, Counselor of the Division of Foreign Countries and International Organisations; Maria Sveshnikova, Deputy Head of the CIS, EAEU and international organizations section of the Department of Museums and External Relations; Igor Kapyrin, Deputy Director of the Department of European Cooperation, MFA; Luka Ezerskiy, Department of European Cooperation, MFA and Denis Moskalenko, Head of Division of Regional Cooperation of the Department of European Cooperation; Lena Alexandrovna Karnovich, EEAS-MOSCOW, EU-Russia Cooperation Programme, EU delegation in Russia, Russian Federation; Robert Nilsson, Deputy Director, Ministry of Culture, Sweden.