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Baltic Development Forum

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Transnational Digital Collaboration in the Baltic Sea Region:

Working Paper for the PA Inno Strategy Guide

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Working Paper for the PA Inno Strategy Guide

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This policy paper identifies the main digital challenges and policy priorities for countries in the Baltic Sea Region (BSR) including Norway and Iceland, with regard to transnational collaboration. A key point in the policy paper is that defining and implementing a macro-regional Strategy Guide dealing with transnational digital policy issues can complement and support the implementation of national digital strategies, thereby promoting innovation, global competitiveness and growth in the BSR. Also, there is a potential for, and strong interest in, increased macro-regional digital collaboration among policy makers in the BSR. The policy paper is based on a survey of national digital policies and strategies in the BSR carried out November 2015 – January 2016, interviews with policy makers, and conclusions from a seminar with policy makers, industry representatives and experts held in Tallinn on 20th January 2016 (see Annex 1 for information on background and process).

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Content

The Digital Agenda in Europe

Digital technologies are and will be fundamentally transforming the ways we live and work. Moreover, digital technologies can be a source for innovation, growth and social inclusion.[1] As a result, policy makers and stakeholders across all governance levels in Europe are developing policies and implementing measures to explore and exploit the potential of the digital economy and society.

At EU level, the Digital Agenda is a policy priority for the European Commission and forms an integral part of the EU 2020 strategy. The realisation of a Digital Single Market is a cornerstone in the Digital Agenda, and in May 2015 the Commission presented a Digital Single Market Strategy building on three pillars:[2]

1. Better access for consumers and businesses to online goods and services across Europe
2. Creating the right conditions for digital networks and services to flourish
3. Maximising the growth potential of the European Digital Economy

In addition, the European Commission is engaged in digitally transforming the public sector, for instance through the European Commission's eGovernment Action Plan 2011-2015 which supports the provision of innovative eGovernment services focusing on four priority areas:[3]

1. Empowering citizens and businesses
2. Reinforcing mobility in the Single Market
3. Enabling efficiency and effectiveness
4. Creating the necessary key enablers and pre-conditions to make things happen

The strong political focus on the digitisation of the economy and society is also reflected in the policies and strategies being implemented at national, regional and even local levels.

[1] OECD (2007), Innovation and Growth. Rationale for an innovation strategy, http://www.oecd.org/science/inno/39374789.pdf; Strategic Policy Forum on Digital Entrepreneurship (2015), Digital Transformation of European Industry and Enterprises, http://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?item_id=8188&lang=en&title=%27Digital-Transformation-of-European-Industry-and-Enterprises%27-%E2%80%93-report-from-the-Strategic-Policy-Forum-on-Digital-Entrepreneurship; European Commission, http://ec.europa.eu/growth/sectors/digital-economy/importance/index_en.htm; World Economic Forum, http://www.weforum.org/agenda/archive/fourth-industrial-revolution

[2] http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1447773803386&uri=CELEX:52015DC0192

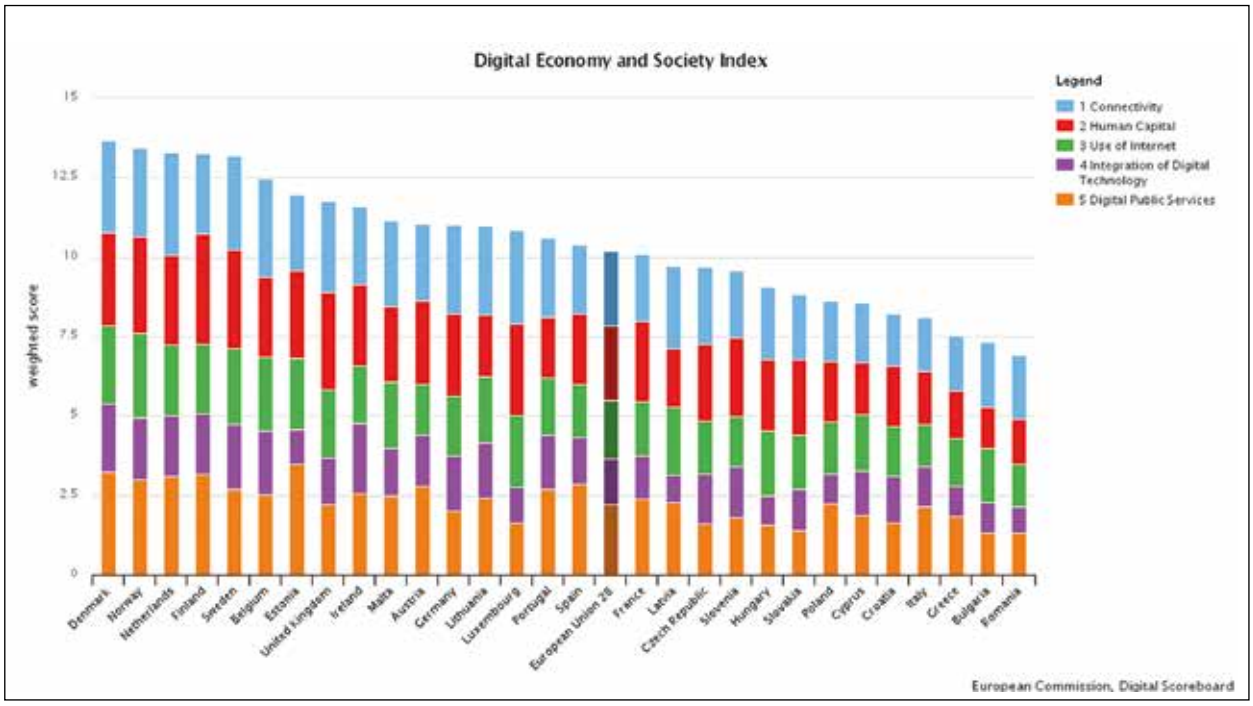
[3] A public consultation on the Commission's eGovernment Action Plan 2016-2020 has recently been carried out with these results: https://ec.europa.eu/digital-single-market/en/news/contributions-and-preliminary-trends-public-consultation-egovernment-action-plan-2016-2020

Digital State-of-Affairs in the Baltic Sea Region

The countries in the BSR are characterised by a high level of digitisation of the economy and the society.[4] However, according to the Digital Economy and Society Index (DESI) 2015, there are also substantial differences between the BSR countries: Denmark, Sweden and Finland are in a lead position followed by Estonia, Germany, Lithuania, Latvia and Poland, cf. Figure 1 below.[5]

The think tank "Top of Digital Europe", established by Baltic Development Forum and Microsoft, has published a report, "State of the Digital Region 2015", that explore in more depth the Digital Agenda in the BSR based on more than 1500 data indicators.[6] According to this report, the overall ranking of the BSR countries suggests a 'constant gap between these countries, with the Nordics in the lead, the Baltics on the other end of the gap, and Poland lagging behind'. However, according to the report, the size of the gap is not constant across indicators, and the ranking of the countries differ substantially from indicator to indicator. This suggests that there is a potential for all BSR countries with regard to improving their relative performance.

Figure 1. DESI 2015 overall ranking of EU member states



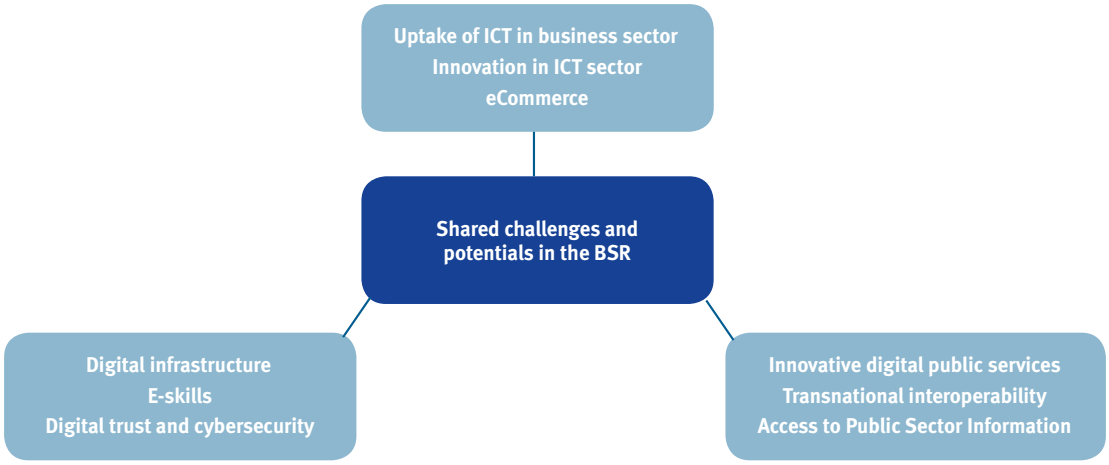
Source: DESI 2015

[4] For the digital performance and potentials of the BSR, see "State of the Digital Region 2015" and "Digital Single Market – growing the Baltic Sea Region" by Top of Digital Europe, www.topofdigital.eu
[5] European Commission, https://ec.europa.eu/digital-agenda/en/desi
[6] Top of Digital Europe - BDF and Microsoft 2015), "State of the Digital Region 2015", http://topofdigital.eu/wp-content/uploads/2015/03/SODR_report_web.pdf

Key Digital Challenges and Potentials in the BSR Countries

The survey of national digital policies and strategies, the interviews with policy makers and the conclusions from the seminar in Tallinn suggest that the BSR countries are facing similar challenges in the digital area, albeit in a varying degree. The key digital challenges and potentials are identified and further described below, cf. Figure 2:

Figure 2. Overview of key digital challenges and potentials in the BSR countries



Digital Infrastructure

A well-developed digital infrastructure is a driver of innovation and productivity. There is a strong focus on improving the digital infrastructure in all BSR countries, in particular in Germany, Poland and the Baltic States. The Nordic countries are also focusing on developing the next generation of technologies as well as promoting access to high-speed internet in rural areas.

E-Skills

Overall, the BSR countries are characterised by good e-literacy and e-skills. However, access to ICT practitioners is considered a challenge in most BSR countries, with many of the countries facing a shortage in the coming years. For example, the demand for ICT practitioners in Latvia in 2020 is expected to exceed supply by 21 %.[7] A shortage of ICT practitioners will have a huge negative impact on the innovation and competitiveness capacities of the national ICT sector as well as other sectors. Finland faces a somewhat different situation due to a high number of redundant ICT practitioners from the mobile industry that need to be re-skilled to meet the needs of other industries.

In order to address this challenge, the countries in the BSR need to introduce programming in schools, provide teachers and school leaders with the necessary resources and incentives to leverage ICTs in education, attract more students to ICT educations, and strengthen collaboration between education and industry. Macro-regional collaboration could support policy makers by facilitating the exchange of experiences and good practice in this area.[8]

Digital Trust and Cyber Security

According to the European Commission, web-based attacks in the EU and around the world increased by 38% during 2015.[9] As a result, cyber security has become vital to consumer confidence and thus the digital economy. Trust and security is also key to the uptake of eGovernment solutions and the protection of personal data. The BSR is home to important players in the field of cyber security,

[7] *Information provided by public officials in Latvia.*
[8] *Top of Digital Europe – BDF and Microsoft (2015): Coding the Future. The challenge of meeting future e-skill demands in the Nordic-Baltic ICT hub,*
[9] *http://www.bdforum.org/cmsystem/wp-content/uploads/E-SKILLS-2015_perPAGEdigital-pageturn.pdf*
European Commission, https://ec.europa.eu/digital-agenda/en/trust-and-security

both research and industry. In addition, Estonia is home to NATO Cooperative Cyber Defence Center of Excellence. Increased macro-regional collaboration between key players in this field could boost cyber security and also promote competitiveness and growth through the development of innovative solutions.

Business Uptake of Digital Solutions

There is a huge growth and innovation potential in the digital transformation of businesses, for instance by promoting the uptake of eCommerce solutions, use of big data, etc. However, the slow progress in business take-up of digital solutions is considered a huge challenge in all countries. The slow progress is often explained by a lack of knowledge and skills among business managers, lack of access to funding, and lack of access to ICT practitioners. The challenge not only related to the take-up of basic ICT solutions and internet use, but also refers to the use of ICT to fundamentally transforming production processes and value chains (Industry 4.0).

There is a huge potential for innovation and increased productivity if the business sector increases the uptake of digital solutions. One area with substantial innovation and growth potentials is advanced manufacturing. A joint Nordic project on advanced manufacturing was launched in 2015. The project will map initiatives concerning digitisation and automation of the manufacturing industry in the Nordic countries and identify future joint initiatives supporting the transformation of the Nordic manufacturing industry.[10] Some of these initiatives may also be relevant to consider in a macro-regional context.

Innovation and Competitiveness of the National ICT Sector

The relatively small domestic markets of many of the BSR countries requires their national ICT sectors to focus on integration into international networks and value chains. Key challenges relating to innovation and competitiveness of national ICT sectors also includes the need to promote digital start-ups and stimulating their growth. Finally, there is a need to increase R&D investments in ICT and facilitate collaboration between the business sector and the ICT research community. Macro-regional collaboration at policy level and between clusters and key actors could help boost innovation and growth of the ICT sector in the BSR. Specific initiatives could include setting up and linking transnational testbeds, promoting cluster-to-cluster collaboration and exploring the potential for transnational accelerator programmes for digital entrepreneurs.

eCommerce

Increasing the share of companies involved in transnational eCommerce is a key challenge in most BSR countries. The main barriers to transnational eCommerce include problems with transnational payments, delivery costs and language issues. A recent report from "Top of Digital Europe" shows that there are significant economic gains to be had within a short number of years, if the BSR countries are able to improve their performance and converge up to the best performing country in a number of areas relating to the digital single market.[11]

Transnational Interoperability

Key factors limiting the transnational exchange of data include a lack of interoperability related to for instance electronic identification, electronic documents, and base registers. One example of a recent initiative in the BSR aiming at promoting transnational data exchange is the transnational eSignature mutual signing and standardisation solution which is under development in the Baltic States.[12]

Innovative Digital Public Services

There are substantial differences in the maturity of digital public services across the BSR, with the Nordic countries and Estonia taking the lead, cf. DESI 2015. A number of factors constitute a barrier to further development of digital public services, including a lack of cross-departmental operability and a lack of skills within public sector. Moreover, there is a need for resources and information on methods for a more systematic involvement of citizens and businesses in the development of digital public services. Finally, the use of digital public services by citizens or businesses is facing a number of societal barriers, including a lack of awareness among potential users, digital illiteracy in parts of society or unwillingness to use digital public services due to lack of trust or perceived need, etc.

Open Data

Open access to public sector information can drive innovation in the public sector as well as in the private sector. A study on the economic impact of PSI (Public Sector Information) conducted by the European Commission in 2011 estimated the overall direct and indirect economic gains at 140 billion Euros.[13] However, the access to and availability of public sector information currently varies across the BSR countries, thus making it difficult to develop transnational solutions.

[10] http://www.norden.org/da/aktuelt/nyheder/faellesnordisk-samarbejde-skal-styrke-omstillingen-til-avanceret-produktion
[11] Top of Digital Europe - BDF and Microsoft2015), "A Digital Single Market: growing the BSR". http://topofdigital.eu/wp-content/uploads/2015/03/DSM_report.pdf
[12] https://valitsus.ee/sites/default/files/news-related-files/ee_bcm_chairmanship_ict_work_programme_for_2014.pdf
[13] http://digitalbaltic.eu/psi-open-data/

Priorities for Transnational Digital Collaboration in the BSR

The survey, interviews and the discussions at the policy seminar in Tallinn have confirmed that there is a potential for and a strong interest in increased digital cooperation between national policy makers and industry representatives in the BSR countries. One reason for this is that the BSR countries share digital challenges. Also it seems to be a general view that increased cooperation in the BSR can support the implementation of national digital strategies as well as complement the national strategies by adding a transnational policy perspective. Moreover, increased cooperation can help transform the region into global digital frontrunner, for instance by accelerating digitisation processes and promoting the development and uptake of innovative digital solutions in the region.

At the seminar in Tallinn, the seminar participants identified the five most important digital priorities for macro-regional collaboration:

1. Promoting transnational interoperability incl. standards, for instance through the implementation of transnational collaboration projects in the region.
2. Promoting innovation in the ICT sector and support for digital start-ups, for instance through transnational digital accelerator programmes, new innovation methods, and re-thinking regulation to accommodate innovative digital business models.
3. Increasing the uptake of ICT in the business sector including Industry 4.0
4. Increasing digital trust and cybersecurity
5. Developing innovative digital public services, for instance by introducing new regulation, removing administrative obstacles and promoting user involvement.

These digital policy priorities can be addressed in different ways by policy makers, cf. specific proposals for transnational actions below. However, the policy makers in interviews and at the seminar stress that future transnational initiatives in the BSR need to provide a clear added value to the development and implementation of national digital strategies as well as to the existing collaboration at Nordic and EU levels and in the OECD.

Moreover, transnational projects that aim at developing concrete concepts or solutions are more important than projects with only a policy focus. Policy collaboration and exchange of good practices is addressed at Nordic and EU levels and in the OECD. At national level, projects that aim at developing solutions to specific needs and challenges hold more relevance and could add value to the implementation of the national digital agenda. In addition, such transnational innovation projects could transform the BSR into a 'digital innovation lab' for the EU as well as provide an opportunity for the BSR countries to setting technical standards at European and global level.

Proposed Action Areas

Strengthening the Knowledge Base

There is considerable interest in strengthening the macro-regional knowledge base through activities such as benchmarking and best practice studies, macro-regional studies and increased information sharing on activities in the BSR countries concerning key themes such as Digital Single Market, e-skills, ICT in education, eGovernment, Industry 4.0, Smart Cities, Internet of Things, transition to IPv6, and cyber security.

Specific proposals include a study on price comparison for small parcel delivery and an economic analysis of accessibility to electronic services. In addition, the screening and development of business cases concerning transnational e-solutions could provide input to decisions concerning the launch of concrete projects aiming at developing and testing transnational solutions in relevant areas.

Support Exchange of Experiences and Regulatory Dialogue

There is a strong interest in promoting exchange of experience and peer-to-peer learning, for instance with a focus on enterprise architecture, transnational interoperability, cybersecurity, user-centred design, developing fact-based digital policies and strategies, digital public services, etc. Peer-to-Peer learning for instance in the form of study visits is already being organised on a bilateral basis and at Nordic level, but it could be interesting to increase the frequency of peer-to-peer learning activities across the BSR.

A specific initiative proposed by the seminar participants is the establishment of a *macro-regional network on digital policy* in the BSR to promote exchange of experiences and best practice. The network should include policy makers, stakeholders such as business associations and NGO's, and experts. In addition to supporting exchange of experience and best practice, the network could discuss interoperability issues, standards and regulatory obstacles to the realisation of the digital single market and identify joint solutions. Finally, this network provides an opportunity for the BSR countries to coordinate policy for instance by discussing and developing common positions in relation to EU digital affairs.

Define and Launch Transnational Projects With a Clear BSR Added Value

The study respondents and seminar participants suggest that the following transnational projects could contribute to further digitalisation of the economy and society in the BSR countries:

- Promoting the Industry 4.0 agenda[14] in the BSR by facilitating the development and testing of innovative value chain collaboration in the BSR.

- Developing and testing transnational digital solutions with a focus on eID[15] recognition, electronic payments, electronic invoices, e-signatures, etc. Relevant projects could also include projects aiming at developing a digital infrastructure for maritime communication.

- Support innovation and competitiveness of the ICT sector by promoting the development, collaboration and internationalisation of ICT clusters in the BSR.

- Promoting digital start-ups and attract global ICT investors to the region through for instance a review of regulation and support for digital start-up accelerator programmes covering the BSR. Such accelerator programmes could benefit from existing transnational projects in the region such as 'Central Baltic Startup Springboard'[16] under the Central Baltic Programme 2014-2020.

Facilitate open access to PSI in the BSR countries to promote the development of innovative digital solutions.

[14] *Computerisation of manufacturing industries*
[15] *Electronic identification*
[16] *https://www.turku.fi/en/cbspringboard-en/about-springboard*

Next Step

According to the policy makers in the BSR countries, there is a strong interest and potential in transnational digital collaboration in the BSR. The suggested action areas and ideas for transnational collaboration projects in this paper will serve as inspiration for a continued informal dialogue with digital policy makers, industry representatives and other key stakeholders in the BSR landscape of digitalisation.

Annex 1: Background

The Digital Agenda is a focus area for Policy Area Innovation (PA Inno) under the EU Strategy for the Baltic Sea Region (EUSBSR). In 2015, the Steering Committee of Policy Area Innovation set up a task force to develop a Strategy Guide for 2016-2020, including the preparation of a framework for regional cooperation related to the digital economy. Task force members are Swedish VINNOVA, Poland's Ministry of Science and Higher Education, Estonia's Ministry of Economic Affairs & Communication, Danish Agency of Science, Technology & Innovation (DASTI) and Baltic Development Forum (BDF).

The work of the taskforce has been split into three tracks:
1. Research and Innovation (VINNOVA lead)
2. Cluster Policy and SME development (DASTI lead)
3. ICT and digital growth (BDF and Estonia's Ministry of Economic Affairs & Communication lead)

This policy paper is the draft contribution to the Strategy Guide concerning track 3 "ICT and digital growth". In the Strategy Guide, the taskforce will explore in more detail how macro-regional collaboration can support and complement national digital policies and initiatives.

The Process

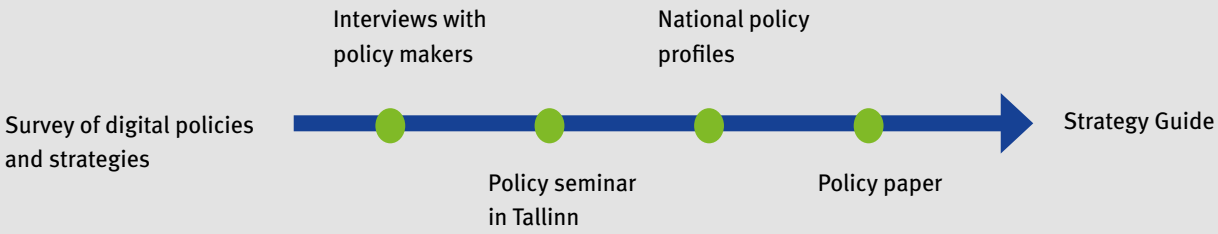
The objective of track 3 "ICT and digital growth" is to explore the need for and potential of transnational digital collaboration in the BSR based on inputs from national policy makers, experts and industry representatives in the BSR. Furthermore, track 3 will help identify key policy priorities and proposals for actions with a clear BSR added value.

For this purpose, a number of analytical activities have been carried out to involve national policy makers, experts and stakeholders:
- A survey of national digital strategies and policies to identify the national challenges and policy priorities
- Interviews with key national policy makers, experts and industry in the BSR countries (see Annex 2 for a list of respondents and key contacts).

The outcomes of the analytical activities were discussed at a seminar in Tallinn on 20th January 2016 with policy makers, experts and industry representatives. In addition, the analytical activities have formed the basis for the development of digital policy profiles for each of the BSR countries. These policy profiles provide important input to the policy paper, and they will also be used proactively in the future development of the Strategy Guide to ensure that the Guide addresses digital challenges and issues of high importance to national policy makers in the BSR.

The overall process is illustrated below:

Overview of the process



This policy paper summarises the conclusions from these activities and an international seminar with policy makers, industry representatives and experts held in Tallinn on 20th January 2016. In addition, the paper sets out the main priorities for digital policy collaboration as well as proposals for specific macro-regional actions. Finally, it includes a SWOT analysis (Annex 3) based on inputs from desk research, interviews and the seminar in Tallinn.

Strategic Objective of Track 3

A key conclusion based on the inputs received and discussions with policy makers is that the BSR countries share digital challenges and priorities. Moreover, there is a strong interest in increasing the level of digital policy collaboration in the BSR. It is important, however, that macro-regional activities complement activities at national, Nordic and EU levels.

Based on the inputs from policy makers, the strategic objective for transnational digital collaboration in the BSR is to support the further digitisation of the economy and society, in particular by promoting interoperability, increasing the uptake of digital solutions by the business sector, and developing the fundamentals: Digital infrastructure, e-skills and digital entrepreneurship ecosystems.

To achieve these strategic objectives, the policy makers have identified the following macro-regional action areas:

1. Strengthening the knowledge base
2. Support exchange of experiences and regulatory dialogue, for instance by establishing a macro-regional digital policy network for policy makers, experts and industry
3. Define and launch transnational collaboration projects with a clear BSR added value.

Annex 2: Respondents

Poland	*Sebastian Christow*, Director, Ministry of Digital Affairs, Department of Informatization. *Michał Bukowski*, Minister's Counsellor, IT Strategy and Enterprise Architecture Division, Department of Informatization, Ministry of Digital Affairs
Germany	*Dr. Frank Goebbels*, Director, European Digital Policy, Federal Ministry of Industry and Energy *Quirin Blendl*, Senior Manager, Digitalisation and Industrial Value Chains, Federation of German Industries
Estonia	*Taavi Kotka*, Deputy Secretary General, ICT, Ministry of Economic Affairs & Communications *Siim Sikkut*, Digital Policy Adviser, Government Office
Latvia	*Elita Zvaigzne*, Senior Consultant, INFSO and eGovernment, Ministry of Environmental Protection and Regional Development
Lithuania	*Aiste Paradnikaite*, Ministry of Economics *Daiva Kirkilaite-Chetcuti*, Head of Information Society Unit, Office of the Government of the Republic of Lithuania
Finland	*Tapio Virkkunen*, Ministry of Employment and Economy *Antti Eskola*, Ministry of Employment and Economy *Olli-Pekka Rissanen*, Senior Adviser, Ministry of Finance
Norway	*Tor Alvik*, Agency for Public Management and e-government
Sweden	*Cecilia Sjöberg*, Head of Division, Vinnova *Lena Carlsson*, Executive Director, Digitalisation Commission
Denmark	*Torsten Andersen*, Head of Department, EU & International Affairs, Danish Business Authority *Mikael Bomholt Nielsen*, Head of Section, EU & International Affairs, Danish Business Authority *Yih-Jeou Wang*, International coordinator, Danish Agency for Digitisation
Iceland	*Elvar Knútur Valsson*, Senior economic advisor, Ministry of industries and innovation

Annex 3: SWOT Analysis

Digital policy collaboration in the Baltic Sea Region can build on existing strengths, but also needs to take into account various weaknesses in the region. Moreover, digital policy collaboration in the macro-region may be affected by different 'external' factors that constitute opportunities or threats for digital policy collaboration.

The Strengths, Weaknesses, Opportunities and Threats form the digital policy space in the macro-region in which policy makers and stakeholders are currently operating, and thus need to be taken into account in the development of a Strategy Guide for PA Inno.

Strengths

The Baltic Sea Region is relatively advanced in terms of digital readiness. This is evident from the high levels of digital infrastructure penetration and uptake in several of the BSR countries. The countries in the region are also characterised by thriving digital start-up scenes and shared digital priorities and challenges.

In addition, formal structures for macro-regional policy collaboration are already established. One example is Policy Area Innovation (PA Inno) under the EU Strategy for the Baltic Sea Region. Key public and private actors in the BSR also have substantial experience with transnational collaboration, for instance from Interreg-funded projects and bilateral transnational initiatives such as the X-roads collaboration project between Finland and Estonia.

Weaknesses

One of the basic weaknesses is that there is currently no coordinating body for digital policy collaboration across borders in the BSR. Also, the responsibility for digital policy is shared by many authorities at the national level, which may prevent cross-departmental collaboration both nationally and transnationally, due to differencing institutional contexts for digital policy making.

Another weakness is the lack of data on policy outcomes. One example is the lack of data on implementation or adaptation on ICT in education, which means that the knowledge base for exchanging best practice and experiences is not yet sufficiently developed.

Finally, many of the BSR countries are relatively small markets, and currently the markets in the BSR are fragmented. There is a need for removing regulatory and technical obstacles to transnational transactions by introducing new regulation and developing joint standards.

Opportunities

The implementation of national digital policies and strategies is a political priority in all BSR countries. The same goes for dealing with transnational issues relating to for instance the digital single market. However, the national policies and strategies in the BSR countries are only to a limited extent identifying specific measures dealing with transnational digital issues. Defining and implementing a macro-regional strategic action plan for dealing with transnational digital issues can thus complement and support the implementation of national strategies.

Moreover, current political focus areas such as growth and innovation, the Single Market and public sector modernisation all have a digital dimension. This suggests that focusing macro-regional collaboration on digital policy can help maintain and possibly increase political support for transnational activities in the BSR.

Efforts to promote digital innovation in the business sector in general as well as the competitiveness and innovation capacity of the ICT sector including the support for digital startups are at centre stage of national growth and innovation policies. Digital policy collaboration in the BSR can contribute to the realisation of these

strategies, for instance by supporting the development and implementation of smart specialisation strategies in the BSR countries.

Finally, cities in the BSR are engaging in transnational collaboration with other cities, for instance through the Union of Baltic Cities. Strengthening the involvement of cities in transnational collaboration on digital issues could form the basis for the launch of concrete and highly visible transnational digital projects.

Threats

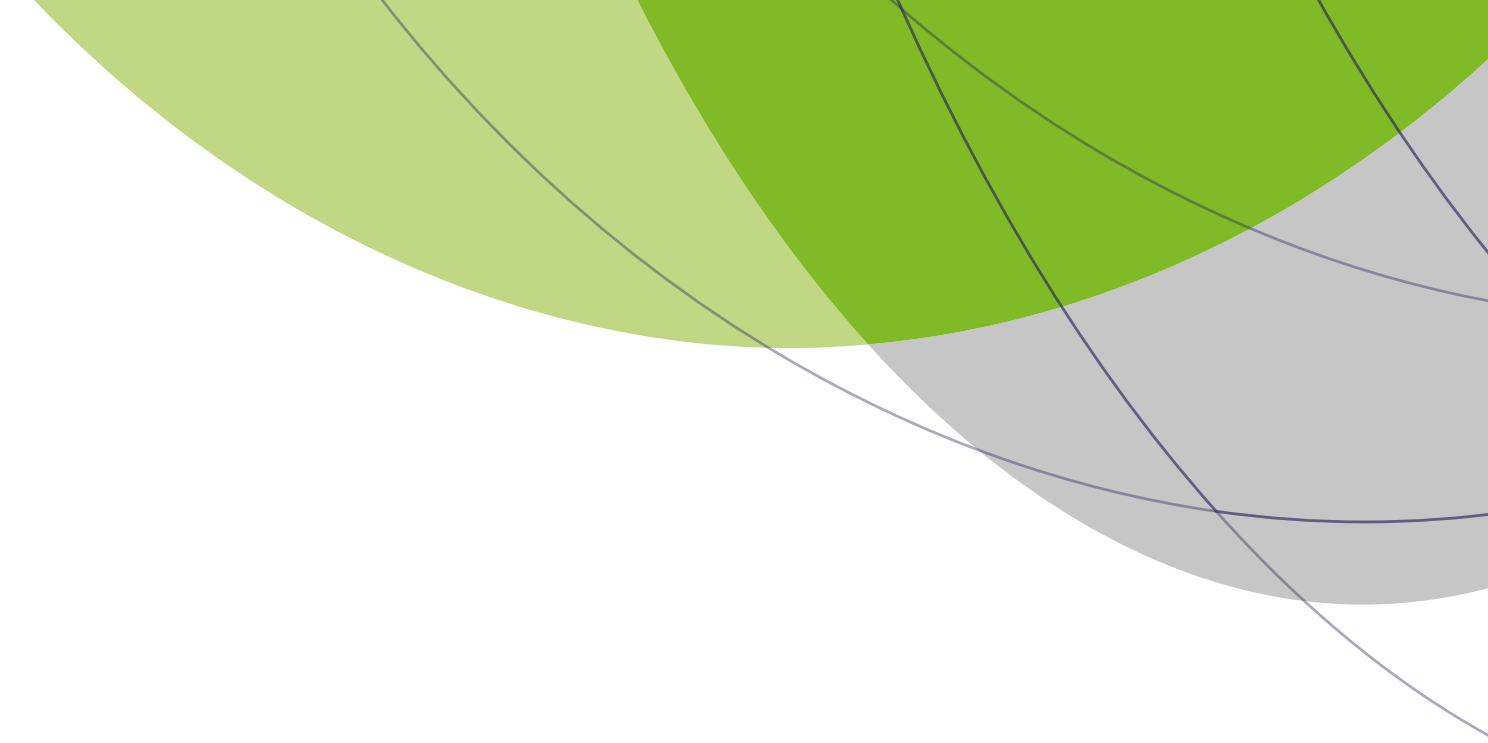
Political relations and coherence within the EU are currently under stress, not least due to the migrant and refugee crisis, which has triggered the re-introduction of border controls between a number of EU member states, including Denmark and Sweden. This situation may reduce the political support for transnational collaboration, also in the BSR.

In addition, the macro-economic situation in Europe is a cause for concern due to uncertainties with regard to the development of the global economy, in particular the current uncertain growth prospects for China. A significant worsening of the macro-economic situation in Europe and the BSR may have a negative impact on the financial resources available for engaging in transnational collaboration, also in the BSR.

Finally, digital policy collaboration in the BSR is competing for political attention and funding with national activities as well as transnational activities at Nordic and EU levels. As a result, increased transnational collaboration in the digital area is dependent on the perceived importance and added value of macro-regional collaboration by the political leaderships in the BSR countries.

The strengths, weaknesses, opportunities and threats are summarised in Table 1 below:

STRENGTH	OPPORTUNITIES
High levels of digital infrastructure penetration and uptake	Implementation of national digital policies and strategies
Thriving digital start-up scenes	Political focus on growth and innovation, the (digital) single market and public sector modernisation
Shared digital priorities and challenges	Smart specialisation agenda
Experience with transnational projects	City-to-city collaboration in the BSR
Established structures for macro-regional collaboration	
WEAKNESSES	**THREATS**
No coordinating organisation for digital policy collaboration in the BSR	EU political relations under stress
Responsibility for digital policy is shared by many authorities at the national level	Uncertain economic prospects
Lack of data on policy outcomes	Limited political commitment and funding for macro-regional collaboration
Fragmented markets in the BSR	



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