Joint Peer Reviews Report

Section 1: Introduction and Overview

This report is composed of four sections and an attachment. The first section - "Introduction   and Overview" section aims, after a synthetic description of the structure of the Report and a Synopsis of the implemented Field Visits, to point to the high heterogeneity of the SKILLS+ project's reference area regarding a number of dimensions and, primarily, the definition and maturity of the digitalisation, strategic focuses and development constraints.

The next - "Comparative Analysis" section is based on a Comparative Analysis of the 11 Peer Review's (PR) Findings and Recommendations on eight topics (Regional Strategy; Education, Skills and Capacity Building; Favourable Business Environment; Partnerships and Networking; Access to Finance; Administrative and Technical Issues; Awareness Raising and Motivation; Internationalization).

The third section, "Digitalisation policies impact indicators" is an attempt to connect the dimensions related to the different areas of the strategic development of digitalisation with a series of qualitative-quantitative indicators related to the impact of digitalisation policies. In this respect, this section attempts to provide an assistance for a first phase of identification and collection of potential indicators for the Action plans.

The fourth section contains general conclusions and observations of the main results.

The attachment reflects the results of the Peer Reviews' Checklists.

This Report is conducted by the University of Latvia SKILLS+ team mainly using the Peer Reviews results (Reports, Checklists, etc.) and SKILLS+ Joint Study based on partners Baseline Reports and authors' own research, as well as additional information provided by the project partners during the process.

The Table 1.1 summarizes the main information about the Peer Reviews. In the fourth column, participants also include representatives of the partners who, as Regional Government Departments, RDAs or research institutes or universities, are involved in defining the policies of their region, as shown in the Comparative Analysis of Checklist "Partnerships and networking" section.

Table 1.1. Synopsis of the implemented Peer Reviews

Hosting Partner [1]	Peer Review Week [2]	Team of Experts [3]	Number of Participating Stakeholders & Representatives of Policy Making Institutions [4]	Number of meetings/ interviews [5]
PP1	4–8/09/2017	**Ms. Mari Grut** (PR Team Leader), Regional Authority of Sør-Trøndelag, Norway. **Ms. Paulina Tomašković**, Ministry of Economy, Entrepreneurship and Crafts, Croatia. **Ms. Andrea Knežević**, Zadar County Rural Development Agency, Croatia. **Mr. Torgeir Svae**, Rørosregionen business garden, Norway. **Mr. Guri Heggem**, Rørosregionen business garden, Norway.	13	10
PP2	18-22/09/2017	**Dr. Dariusz Wilk** (PR Team Leader), Małopolska Regional Development Agency, Poland. **Ms. Ana Zubčić**, Zadar County Rural Development Agency (AGRRA), Croatia. **Ms. Ana Odvitović**, Inovativni Zadar Ltd., Croatia. **Ms. Santa Sipola**, Ministry of Environmental Protection and Regional Development, Latvia. **Ms. Una Rogule-Lazdiņa**, Ministry of Economics, Latvia. **Andreas Vierling**, IT Central Germany cluster association, Germany. **Mr. Haralambos Kiourktsidis**, Managing Authority of the Regional Operational Programme of Western Macedonia, Greece.	15	6
PP3	02-06/10/2017	**Ms. María José Pérez** (PR Team Leader), Regional Government of Castile and Leon, Spain.	17	8

		Mr. Luis Alejandro Fonseca Moro, ADECOCIR (Association for the rural development of Ciudad Rodrigo Region), Spain. **Mr. Lovro Valcic**, Bruncin Ltd., Croatia. **Ms. Ana Zubčić**, Zadar County Rural Development Agency (AGRRA), Croatia. **Mr. Eistein Guldseth**, Sør Trøndelag County Authority, Norway. **Mr. André Bakeng**, Sør Trøndelag County Authority, Norway.		
PP4	6-10/11/2017	**Dr. Ivana Polakova** (PR Team Leader), Technical University of Ostrava, Czech Republic. **Dr. Dariusz Wilk,** Małopolska Regional Development Agency, Poland. **Mr. Janusz Kahl**, South Poland Cleantech Cluster Ltd., Poland. **Ms. Maria José Pérez,** Regional Government of Castille and Leon, Spain. **Ms. Deborá Fernández Abril**, Chamber of Commerce of Valladolid, Spain. **Ms. Ana Zubčić**, Zadar County Rural Development Agency (AGRRA), Croatia.	17	9
PP5	4-8 /09/2017	**Ms. Ninetta Chaniotou** (PR Team Leader): Kainuun Etu, Finland. **s. Paula Karppinen,** Regional Council of Kainuu, Finland. **Ms. Santa Sipola**, Ministry of Environmental Protection and Regional Development, Latvia. **Dr. Marie Kubanková**, Ostrava Technical University, Czech Republic. **Dr. Ivana Polaková,** Ostrava Technical University, Czech Republic.	19	6/8
PP6	25-29/09/2017	**Prof. Yiannis Bakouros** (PR Team Leader), University of West Macedonia, Greece. **Mr. Tsvetan Simeonov**, Bulgarian Chamber of Commerce and Industry, Bulgaria. **Ms. Natalia Dicheva**, Bulgarian Chamber of Commerce and Industry, Bulgaria	12	8/6

		Mr. Vladimir Minev, Bulgarian SME Promotion Agency, Bulgaria. **Ms. Paula Karppinen**, Regional Council of Kainuu, Finland. **Ms. Santa Sipola**, Ministry of Environmental Protection and Regional Development, Latvia. **Ms. Laura Gintere**, Ministry of Environmental Protection and Regional Development, Latvia.		
PP7	09-13 /10/2017	**Ms. Zane Zeibote** (PR Team Leader), University of Latvia, Latvia. **Ms. Santa Sipola**, Ministry of Environmental Protection and Regional Development, Latvia. **Mr. Andzejs Stepancuks**, Vidzeme Planning Region, Latvia. **Ms. Márta Regner**, Pannon Novum Regional Innovation Nonprofit Ltd., Hungary. **Ms. Laura Gintere**, Ministry of Environmental Protection and Regional Development, Latvia.	33	14
PP8	16-20/10/2017	**Mr. Frank Thäger** (PR Team Leader), Ministry for Regional Development and Transport of Saxony-Anhalt, Germany. **Ms. Sophie Kühling**, Chamber of Industry and Commerce of Saxony-Anhalt, Germany. **Dr. Ivana Poláková,** Ostrava Technical University, Czech Republic. **Mr. Rønnaug Nyrnes**, Nasjonalparken Naerringshage AS, Norway. **Mr. Erik Flå**, Nasjonalparken Naerringshage AS, Norway.	25	9/13
PP9	24-27/10/2017	**Ms. Natalia Dicheva** (PR Team Leader), Bulgarian Chamber of Commerce and Industry, Bulgaria. **Dr. Dariusz Wilk,** Małopolska Regional Development Agency, Poland **Mr. Zoltan Kalcsu**, Pannon Novum West-Transdanubian Regional Innovation Nonprofit Ltd., Hungary. **Dr. Rafał Solecki**, Malopolska Centre of Entrepreneurship, Poland.	24	5/12

		Mr. Konstantinos Raptopoulos, Municipality Nestorio, Greece. **Mr. Imre Gyozo Nagy**, Savaria Town Development Nonprofit Ltd, Hungary. **Ms. Zane Zeibote**, University of Latvia, Latvia.		
PP10	6-10/11/2017	**Dr. Marie Kubankova** (PR Team Leader), Technical University of Ostrava, Czech Republic. **Mr. Gumersindo Bueno Benito,** Fundación Santa María la Real del Patrimonio Histórico, Spain. **Ms. Paula Conte García**, Fundación Santa María la Real del Patrimonio Histórico, Spain. **Mr. Markus Leinonen,** Kainuun Etu Oy, Finland. **Mr. Antonín Kintl,** Zemědělský výzkum, spol. s r. o. Troubsko, Czech Republic.	16	8
PP12	20-24/11/2017	**Mr. Markus Leinonen** (PR Team Leader), Kainuun Etu Oy, Finland. **Mr. Attila Joos,** Webmark Europe Ltd., Hungary. **Mr. Thomai Karamitsou**, AGROSENSE Ltd., Greece. **Mr. Peter Szigethy**, Chamber of Commerce and Industry of Vas County and Manager of Kőszeg Micro region, Hungary.	25	6/12

Legend: PP1=Saxony-Anhalt; PP2=Kainuu; PP3=Latvia; PP4=Western Macedonia; PP5=Malopolska; PP6=Sør Trøndelag; PP7=Zadar; PP8=Bulgaria; PP9=Castilla and Leon; PP10=West Pannon; PP12=Ostrava.[1]
Source: Peer Review reports

Short Introduction to the Joint Peer Review Report

During the project second year, each territory was visited by a Peer Review (PR) team including representatives of project partner organizations and stakeholders. During PRs, an in-depth analysis according to the designed methodology was carried out. PRs included site events, meetings with stakeholders, individual interviews, as well as public events in which the international peer review team shared and discussed its initial findings with

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[1] PP11 University of Latvia, which is the Advisory partner, is not included in the comparative analysis.

the host territory, including conclusions and resulting recommendations for policy improvement. PR results are reflected in PR Reports, Checklists and Feedback forms prepared after each PR visit. PR results will be used for preparing partner's Action Plans during the third year.

In total, 11 Peer Reviews with participation of 38 experts were carried out from September until November 2017. During Peer Review visits, **89 meetings and 102 interviews** were organized by the partnership involving at least **216 stakeholders**.

Overview

In preparation for PR visits, PR experts studied regional Baseline Studies, as well as SKILLS+ Joint Report, internet resources and documents provided by hosting partners. Accordingly, PR focus was on the most important regional challenges for promoting digitalisation and use of ICT. According to the SKILLS+ Joint Study the most important challenges for promoting digitalisation and use of ICT in project partners' regions are reflected in the Table 1.2.

Table 1.2. Main challenges for promoting digitalisation of SMEs in the SKILLS+ partners' territories.	
Partner	**Main challenges – PR focus description**
PP1	Main challenges of Saxony-Anhalt are related to improving digital skills and raising awareness of the population, increasing IT competence and know-how by SMEs and their staff, as well as improving accessibility of broadband and technologies for SMEs, especially in rural areas. Improving the online interaction between public authorities and citizens is another national level concern in Germany.
PP2	Main challenges of the Kainuu region are related to raising awareness of population and SMEs about making the use of online services demand driven and exploiting advantages of digitalisation on a greater scale.
PP3	Main challenges of Latvia are related to improving digital skills and e-participation of the population, as well as increasing the use of ICT and online opportunities by businesses.
PP4	Main challenges of the Western Macedonia for promoting digitalization of SMEs are related to the improvement of digital skills, increasing efficient public support for the ICT and related SMEs development, improving on-line services and their accessibility, as well as improving connectivity in the rural areas.
PP5	Main challenges of Małopolska are related to the development and use of digital services, enhancing e-skills of citizens and enterprises, improving ICT infrastructure in rural areas, as well as improving the overall business environment and related legislations.

PP6	Main challenges of Trøndelag are related to problems of SMEs in hiring highly skilled ICT professionals, lack of specific skills important for improving international competitiveness, and absence of individual digital strategies for enterprises.
PP7	Main challenges of Croatia and Zadar are related to improving connectivity and establishing ICT infrastructure in rural areas, ensuring availability of online public services, as well as improving digital skills and raising awareness of population.
PP8	Main challenges of Bulgaria and the Sofia District are related to improving connectivity and accessibility of the Internet in rural areas, as well as performance in digital skills, digitisation of businesses and of public services.
PP9	The most important challenges of the Castilla y León Region are related to attracting funding, as well as ICT specialists, increasing ICT skills and raising awareness about benefits of digitalisation.
PP10	Main challenges of West-Transdanubian Region for promoting digitalization of SMEs are related to improving digital literacy and skills, raising awareness of benefits for businesses brought by digitalisation, as well as development and use of digital services to replace paper documentation with online solutions.
PP12	The most important challenges of the Moravian Silesian Region are related to improving regulatory framework, digital skills and cooperation between organizations on regional and national levels. On the national level, the main challenge is to improve the use of internet services, in particular for e-Government, entertainment and social purposes.

Legend: PP1=Saxony-Anhalt; PP2=Kainuu; PP3=Latvia; PP4=Western Macedonia; PP5=Malopolska; PP6=Sør Trøndelag; PP7=Zadar; PP8=Bulgaria; PP9=Castilla and Leon; PP10=West Pannon; PP12=Ostrava.

In addition, the overall situation in SKILLS+ partner territories regarding digitalisation of SMEs can be well described by the Joint SWOT Analysis reflected in Table 1.3.

Table 1.3. Joint SWOT Analysis

STRENGTHS	WEAKNESSES
⁜ Good access to broadband internet and developed infrastructure, except rural and areas difficult to access ⁜ Gradually increasing share of population using computers, other devices and Internet ⁜ Gradually increasing computer literacy, e-skills development and use of Internet by SMEs ⁜ Low costs for Internet services	⁜ Uneven broadband coverage (regional imbalances) with low penetration of broadband access in remote, sparsely populated, difficult to access (mountains) and rural areas ⁜ Slow growth and volatile development of online sales and purchases ⁜ Lack of digital skills, high-level specialists and competences even in the most digitally advanced regions

🔸 Strong development of digital competences across the entire framework of education 🔸 Accessibility to EU, public or regional (Norway) funds for the ICT development	🔸 Businesses aren't taking full advantages of opportunities provided by ICT and the Internet; lack of relations between production and digitalization 🔸 Aging societies with low or no digital knowledge, competences and ICT skills 🔸 Absence of a strong government-level leadership supporting ICT development and digitalization on all levels.
OPPORTUNITIES	**THREATS**
🔸 Using broadband connections and access to the Internet in most public areas; getting easier and cheaper access to new technologies, tools and competences 🔸 Using EU and other public and regional funds to continue to develop infrastructure, technologies, e-government and services 🔸 Facilitating businesses development and improving living conditions also outside of cities 🔸 Developing new innovative digital products and ideas, using new technologies for exploiting new chances 🔸 Using the digital change in the market as an opportunity to work more flexibly and efficiently, develop lively corporate culture and flexible working teams, increase customer satisfaction, develop digital communication and interaction with customers, evaluate customer behaviour through digital market and shops, increase individual offers and use more friendly ways of communication, etc. 🔸 Producing more ICT experts and skilled workers, facilitating foreign investment and development of new ICT related research centres.	🔸 Digital "exclusion" of remote, sparsely populated and rural areas, and socially disadvantaged people 🔸 Lost markets and advantages if SMEs are not able to compete in local and international levels due to the lack of ICT skills, digital knowledge and ability to adapt to rapidly changing technologies and business environment 🔸 IT security and digital economy related threats, i.e. cyber security 🔸 Demographic changes, i.e. aging society, shortage of skills, competences and high-level ICT specialists ('brain drain' in some cases) 🔸 Overly complex ICT-related regulatory framework, difficult to use e-government services with complicated digital certification systems in the presence of a rapid technological change.

Source: SKILLS+ Joint study

According to the Project Application Form, the Peer Reviews were planned to address following policy instruments (Table 1.4). Conclusions and recommendations of PR sessions will be reflected in the SKILLS+ partners' Action Plans.

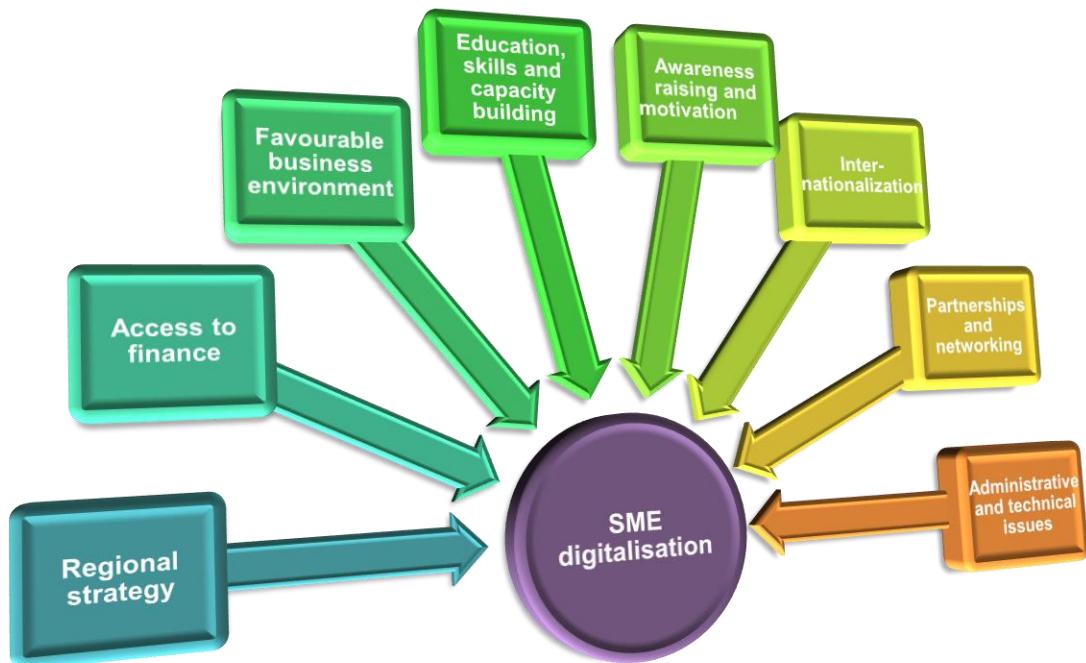| No	Partner region	Policy instrument(s) tackled
Table 1.4. Policy instruments addressed by SKILLS+ partners		
PP1	SACHSEN ANHALT REGION, GERMANY	ERDF OP Saxony-Anhalt 2014-2020, Investment Priority 1b; Strategic Objective 2: Strengthening innovation capacities of the economy in the RIS-defined lead markets.
PP2	KAINUU, POHJOIS-JA ITA SUOMI REGION, FINLAND	Sustainable growth and jobs 2014-2020, Finland's structural funds programme, TL 1 Competitiveness of SMEs (ERDF) Investment Priority 2. Support for SMEs so that they can grow through regional, national and international markets [...], Specific Objective 2.1 To support [...] SMEs.
PP3	REPUBLIC OF LATVIA	Operational Programme „Growth and Employment 2014-2020". Thematic objective (1): Enhancing access to and use and quality of ICT, 2.) Developing ICT products, ICT services and e-commerce, as well as to increase the demand in the ICT sphere.
PP4	WESTERN MACEDONIA (DYTIKI MAKEDONIA) REGION, VOREIA ELLADA, GREECE	Axis 2 Investment Priority 2c – Enhancement of ICT applications in e-government, e-learning, e-inclusion, e-culture and e-health.
PP5	MALOPOLSKIE, POLUDNIEOWY REGION, POLAND	Regional Innovation Strategy, Priority axis 2 "Creation of demand for innovation"
PP6	SøR TRøNDELAG, TRøNDELAG REGION, NORWAY	eTrøndelag strategy

PP7	ZADAR, JADRANSKA HRVATSKA REGION, CROATIA	OP Competitiveness and Cohesion 2014-2020, Priority Axis 3: Business Competitiveness; Investment priority 3d: Supporting the capacity of SME to grow [...], Specific Objective 3d1: SME's development and growth improved in domestic and foreign markets.
PP8	SOFIA, YUGOZAPADEN REGION, BULGARIA	Policy implemented through Operational Programme "Innovations and Competitiveness" Priority Axis 2: Entrepreneurship and Capacity for Growth of SMEs.
PP9	CASTILLA Y LEON REGION, SPAIN	ERDF OP 2014-2020 for Castilla y León, Thematic objective 2: Improve access, quality and use of ICT; Specific Objective 2.3.2: strengthening ICT applications for e-government, e-culture and confidence in the digital environment.
PP10	PANNON NOVUM WEST-TRANSDANUBIA, NYGAT-DUNANTUL REGION, HUNGARY	Economic Development and Innovation Operational Programme for Hungary, Priority axis: Info-communication developments
PP12	OSTRAVA, MORAVSKOSLEZSKO REGION, CZECH REPUBLIC	Operational Programme Enterprise and Innovations for Competitiveness, Priority Axis 1: Development of research and development for innovations; Specific Objective 1.2: Increase intensity and effectiveness of cooperation in research, development and innovations

Source: SKILLS+ project Application form.

Section 2: Comparative Analysis

In this section, a comparative analysis of PR reports will take place. The logic of this analysis is reflected by Figure 2.1.

Figure 2.1 – Framework for enhancing SMEs digitalisation

Source: Prepared by the Author according to the SKILLS+ Peer Review methodology

Each of the following 8 sub-sections present two Comparative Tables on Key Findings and Recommendations for the 11 Project Partners, aiming to identify common key findings and recommendations.

Partner	Table 2.1 Key findings - Section 1: Regional Strategy
PP1	It hard to reach rural SMEs with funding and actions for digital development in Saxony-Anhalt, but the relation with the policy addressed and other regional strategies is not clear. The responsibility for digital development and digital infrastructure is split between four different Ministries in Saxony-Anhalt (The Ministry of Regional Development and Transport, the Ministry

	of Agriculture and Environment, the Ministry of Finance, and the Ministry of Science, Economy and Digitalisation). There are both federal and regional policies and instruments for digital development, which are not always coordinated.
PP2	Main strategies and measures on national and regional levels: 1) Finland's Operational Programme, 2014-2020; 2) Finland, a land of solutions; 3) Strategic Programme of Prime Minister Juha Sipila's Government, 29 May 2015; 4) The Regional Plan of Kainuu until 2035; 5) The Kainuu Regional Programme, 2014-2017. Activities within the OP are not directly related to digitalisation, but they are included in policies related to support for environmental business sector. Development of the technology industry (i.e. ICT) is one of the specific goals of Regional Plans/Programmes. ICT and information systems are one of the priorities in the Regional Programme. Clear targets for promoting new business activities, internationalisation and innovation of SMEs are defined in Finland's Operational Programme. Clear goals for developing local technology industry's export, especially in ICT fields, are defined in the Regional Programme.
PP3	The main policy instruments in Latvia are the following: National Development Plan for 2014-2020; Operational Programme "Growth and Employment 2014 - 2020"; The Information Society Development Guidelines 2014 – 2020; National Industrial Policy Guidelines 2014-2020; Science, Technology Development, and Innovation Framework 2014-2020; Latvia's "Regional Innovation Strategy for Smart Specialisation" (RIS3). The Policy Guidelines for the Electronic Communications Sector of the Republic of Latvia 2011-2016. Annual Business Environment Improvement Action Plan; Data Driven National Action Plan; Start-up Law. The most important document for digitalisation is the Information Society Development Guidelines 2014 – 2020. However, it doesn't specifically focus on the SME's digitalisation.
PP4	Digitalisation has been supported by the Greek e-government strategy for the period 2014-2020 which is also reflected by the national OP Priority axes 1 and 2. On the regional level, main policy documents are the ROP and the RIS3 for Western Macedonia. The general objectives of digitalisation and utilisation of ICT in the region: 1) creation of conditions for differentiation of the rather dependent on the energy sector production base; 2) adaptation of local standards; 3) improvement of existing services to citizens with a parallel exploitation of ICT. There is currently no detailed regional ICT strategy per sector and no master plan for e-government services. The main driving forces for digitisation of rural business activities of SMEs: internationalisation and exports; reduction of operating costs; working conditions improvement; improvement of the negative investment climate in Western Macedonia. ROP Western Macedonia, 2014-2020

	provides a supportive framework for increasing the use of ICT and achieving higher productivity under Priorities 1 and 2. There is currently no detailed regional ICT strategy per sector. Also, there is no master plan for e-government services. Most of them (land register, e-Prescription, e-invoicing, etc.) are administered by national authorities addressed by better balanced allocation. Other possible e-services, like local taxation or regional permits, would be administered by the Region.
PP5	Małopolska is a region with high concentration of companies of the ICT industry and it has the second highest employment in the ICT sector in Poland. Twenty-three big international ICT companies, such as IBM, Motorola, Nokia, etc., are located in the capital city of Małopolska – Krakow. The Regional Innovation Strategy, which also includes digitalisation, is largely funded by the ROP 2014-2020.

The policy change is considered important for the region because of following reasons: addressing the rural-urban divide including improvement of the ICT performance of rural SMEs; improving the sophistication of Malopolska's ICT industry; promoting the uptake of ICT by rural and urban SMEs by linking ICT uptake to competitiveness solutions. |
| **PP6** | Digital innovation and development is a priority of the Sør-Trøndelag policymaking. ICT and/or digitalisation are mentioned in a number of the Sør-Trøndelag County policy documents.
Briefly, eTrøndelag is the SørTrøndelag County's policy for the digital development of its territory, launched 10 years ago. From being a vision, eTrøndelag evolved through a program in limited scope and duration, to become a permanent initiative that collaborates with actors locally, regionally, nationally and internationally. ETrøndelag is organized as a regular part of the Unit for Regional Development, and also belongs to the professional group, Industry and Innovation. ETrøndelag will contribute to the digital value creation potential exploited. The ICT industry itself is not the main focus, but rather it is the use and exploitation of ICT across industries and sectors. ETrøndelag consists of four areas: Digital Infrastructure, Digital Municipality, Digital Innovation and Digital Literacy. Considering the planned merger of Nord- and Sør-Trøndelag County Authorities in 2018 into Trøndelag County Authority, it has been announced that the digital perspective will continue to be a main point in the new strategies for regional development in Trøndelag. |
| **PP7** | The main policy instruments are in place, mostly in the national level. The Digital Economy Strategy of the Republic of Croatia is currently under development, as well as the Business Support Organization Network, which should boost the digitalisation of businesses. There was not enough information about regional level policy documents and initiatives to make relevant conclusions. However, clearly, there are support instruments in place, i.e. Zadar Business Incubator, COIN Zadar and others to support SMEs. However, a regional strategy for the Zadar County for the SME's ICT uptake is lacking. According to the Joint study, about 25% of Croatian |

	Zadar businesses have their own digitalisation strategies, which is a very positive indicator. Acknowledging that the implementation of broadband is a complex task, this requires changes in infrastructure, legislation, coordination among institutions, as well as changes in people's mindsets. There is special concern regarding ensuring internet connections in large rural and hard to reach areas including areas that are not commercially attractive to businesses. For this purpose, the Croatian Government has implemented special policy instruments. At the same time, the Internet, particularly with fast connection, is too expensive for most people, which could be an obstacle for the SME's ICT uptake.
PP8	There are several policies in the regional, federal, and EU level promoting digital development of Bulgaria and its regions. Concerning these different strategies and programs, the peer review team found no clearly defined targets for improving SME's competitiveness and missed the specific reference to SMEs (see documents: *National Strategy for the Promotion of Small and Medium Enterprises 2014-2020; National Development Program Bulgaria 2020* and *National Broadband Infrastructure Plan for Next Generation Access* and *Roadmap* for its implementation). There are several strategies and initiatives at federal and regional level for promoting digital development: Bulgarian Smart Specialisation Strategy 2014-2020: priority directions within the framework of the thematic area "Informatics and ICT"; ICT Cluster Bulgaria; Sofia Tech Park (the most important regional level instrument for promoting digitalisation).
PP9	Many strategic documents related to digitalisation such as the CYL Digital Agenda, CYL RIS3 strategy, and CYL ERDF OP are available. The OP ERDF CYL 2014-2020 is focused on improving access to ICT, its use and quality, as well as on the expansion of broadband deployment and support for the adoption of emerging technologies and networks for the digital economy; encouraging the deployment of networks and services to ensure digital connectivity; developing ICT products and services, electronic commerce and greater ICT demand; developing the digital economy, including e-commerce; strengthening ICT applications for e-Government, e-learning, e- inclusion, e-culture and e-health; promoting digital literacy, e-learning, e-inclusion, e-health and digital solutions in these fields; reinforcing e-government, e-culture and trust in the digital field. Most important local CYL DIGITAL initiatives are: Entrepreneurship and Innovation Network; Institute of business competitiveness (ICE) support lines (ERDF co-funding) include; Initiative Valladolid Emprende (Valladolid undertakes). Super computer. Plan PAHIS /CYL Historical Heritage Plan 2014-2020 – important part of the Digital Agenda.
PP10	The key findings from the PR are as follows: Key specialisations sectors are the machine industry, auto industry, electro-mechanics, forestry and wood industry, health, thermal, logistic, ICT, agriculture. There is no regional level digitalisation strategy and the regional level RIS doesn't exist. There is no explicit cluster policy, but there are a lot of initiatives working to help SMEs become digital (basic level of ICT skills). A good level of cooperation between the research sector

	and private sector exist in the automotive industry only. Approval of project proposals takes too much time.
PP12	The ICT uptake by SMEs in the Moravian Silesian Region is facilitated by locating a publicly available IT4IN super computer in the region. In addition, businesses of the region possess unique knowledge and competencies, resulting from the high concentration of the industry in the value chain "Coal-Steel-Machine", which can be applicable for promoting new economic sectors (automotive, engineering, IT, measuring technologically advanced materials, mechatronics and robotics, environmental technology, energy savings, etc.), as well as promote investment in research and development. The Ostrava city and its Technical University (VSB–TUO) has established necessary infrastructure for supporting innovative businesses. The Ostrava city created the plan "Integrated Territorial Investment of Ostrava" agglomeration to be implemented with the assistance of EU funds.
	The key findings from the Joint study and interactive sessions are as follows in the key specialisations sectors: mining, steel industry, ICT, agriculture, power engineering metal industry, energy production and renewable resources. RIS3 is the national level strategy. The region has listed some priorities in their strategy that mainly deal with e-Government; Technical university provides a great base for innovation and has invested a lot in research facilities; ICT sector is strong and varied with large international companies as well as local; Strong national focus on Industry 4.0; Low number of companies applying for H2020 etc.; Positive development approach in the city of Ostrava. However, neither level, national or regional, has a clear digitalisation strategy. ICT strategy has been set on the national level and regions set priorities for ICT development.

Legend: PP1=Saxony-Anhalt; PP2=Kainuu; PP3=Latvia; PP4=Western Macedonia; PP5=Malopolska; PP6=Sør Trøndelag; PP7=Zadar; PP8=Bulgaria; PP9=Castilla and Leon; PP10=West Pannon; PP12=Ostrava.
Source: Peer Review reports

From the analysis of the Comparative Table on Key Findings on Regional Strategies, there is a great deal of heterogeneity in two main dimensions. One dimension regards **the presence or lack of of a regional level digitalisation strategy**. The other dimension **concerns coordination among institutions and strategy and policy documents, as well as the importance of regional-level support instruments and assistance provided by the Operational Programmes.**

PR results indicate that **regional level digitalisation strategies are especially important for the digital development of SMEs; however, they do not exist in case of some partners** (WM, Bulgaria, Latvia, West Pannon, Ostrava) **or are currently under development** (Zadar). In some cases, like for Kainuu Region, the digitalisation strategy is a part of the Regional Programme and for Malopolska Region it is a part of the Regional Innovation Strategy. In the case of West Pannon, the absence of the Regional Innovation System has been noted. Also, **the importance of having digitalisation strategy on a company level has been emphasised** (Sør

Trøndelag). In addition, **coordination among local, regional, national, and federal level strategies and policy documents is lacking. This is particularly important to ensure that there is no overlap or duplication of activities to ensure the most efficient results of digitalisation.** According to the Joint study, ICT is an important part of RIS3 strategies for all partners, except Sor-Trondelag since Norway doesn't have RIS3. However, the RIS3 importance has not been emphasised in PR reports. In PRs of Ostrava and Castilla and Leon, the importance of a publicly available IT4IN super computer in the region have been particularly stressed.

Partner	Table 2.2 Recommendations Section 1: Regional Strategy
PP1	The Baseline Report and Joint Study could contribute to a better understanding of the regional challenges within Saxony-Anhalt for different Ministries responsible for digital development. The peer-review team recommends strengthening the intermediaries who are able to follow-up on the small companies in rural areas. It also recommends ensuring more cooperation between the federal and regional level, as well as stronger cooperation between ministries at a regional level.
PP2	Facilitate the development of 5G broadband infrastructure in Finland as the 4G network is well developed in Finland. Nevertheless, the next generation of mobile broadband, 5G, can be an important network for new services in the future (e.g. autonomous agriculture tractors/harvesters/vehicles/cars). Thus, the development of 5G networks should also be included in the National Broadband Plan for Finland and financial instruments for building the infrastructure (similarly as in fibre network) should be provided.
PP3	The possible recommendations regarding the administrative regulations for less bureaucracy are: Soften participation requirements for ICT training; Reduce negative perception of EU regulations and documentation; Solve issues related to the funding gap between programming periods; Shorten funding cycle for SMEs; Establish digital leadership.
PP4	Public support for internet providers to improve internet access; More intense cooperation between educational institutions and SMEs; Development of clusters and business centres, local business incubators, structures for SMEs support; Define measures to increase SME's competitiveness.
PP5	Ideally, the policy changes would require: adjustments of the Regional Innovation Strategy to include the concepts of the recommendations that would be accepted by Malopolska and; align calls issued by the Malopolska ROP 2014-2020 following the recommendations.
PP6	Trøndelag in particular has a good starting point when it comes to ICT- development at large, also to digitization of rural SMEs. According to interviews with stakeholders and highlighted in the SWOT-analysis, a number of micro- and rural SMEsstill experience challenges when it comes to broadband access to a sufficient speed.
PP7	Main problems related to the implementation of the Digital Agenda are related to improving connectivity. In this respect, local authorities have to be deeply involved and continue working

	on their connectivity plans and projects; State and regional administration should be more innovative and think about new technologies used by businesses, when designing strategies. Correspondingly, innovation requires more flexible approach of the public administration processes and daily tasks.
PP8	Creation of defined measures for strategies (also relating to SMEs); Definition of clear targets for improving SME's competitiveness; Strengthening willingness and cooperation of all stakeholders and actors as financial recourses and strategies are insufficient in reaching the targets.; Deploying and implementing digitalisation strategies on the national and regional levels.
PP9	Implementing broadband infrastructure and ensuring connectivity throughout CyL regions is essential. The use of EU funds and Operational Programmes need to have a special focus on infrastructure broadband development in rural areas. The national level competition legislations should be altered to facilitate digitalisation of rural areas, where operators lack commercial interest.
PP10	Ideally, the policy changes would require 1) adjustments of the OP management, thus speeding up the evaluation process and making it more flexible (e.g. one step evaluation). The OP may support the Innovation Vvoucher distributed via the Business Chamber to cement the support for innovation (similarly as for the "Do Business Digitally Project"). The OP already benefits from the cooperation between research organisations and entrepreneurs. Therefore, it might be useful to add some criteria that would reflect process restructuring based on ICT. From the PR Team point of view, there are several problem-based solutions in the form of projects concerning ICT development for SMEs. Therefore, on the strategic level, there may be some changes to the policy instrument (OP). The PR team also found suggestions that could be provided by the regional initiatives. The majority of domestic rural enterprises have necessary infrastructure to take part in the e-economy (computer or broadband Internet), while micro and small enterprises employing 10 people or fewer are still significantly lagging behind their EU peers. Therefore, promoting internal and external corporate IT development and ICT-based innovation is an important objective.
PP12	Important legal barriers for the ICT development, namely promoting online sales, are related to inconsistent legal interpretations of Consumer Law, which need to be unified with the procurement legislation to provide common standards and conditions. Also, a simple and transparent system for an online dispute resolution is missing.

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Source: Peer Review reports

Also, the Recommendations, similarly as Key Findings, can be grouped, in first instance, around two themes. The first theme is that of **ensuring an improved policy framework and coordination among institutions, as well as flexibility of public administration, including necessary adjustments for the OP and legislation**. The second theme is about the **necessity of broadband infrastructure, better connectivity and internet access**.

Implementation of policy measures will definitely require cooperation between policy makers. Therefore, as the Recommendations' first theme states: **coordination and integration among different regional policy instruments and measures should be strengthened; policy documents and instruments should be better suited for digitalisation needs of SMEs**. Secondly, the **development and improvement of the ICT infrastructure is a precondition for SME's development, especially in rural areas, which should be continued and sped up**. In case of the Kainuu Region, **the development of 5G network** has been recommended. In addition**, support measures for SME's development, start-ups, as well as improvement of the business environment have been mentioned as closely related obstacles for SME's digitalisation.** Specifically, the improvements of the Consumer Law in case of the Czech Republic and amendments to the Law on Competition in the case of Castilla and Leon were emphasised as essential for digital development.

Partner	Table 2.3 Key findings Section 2: Education. Skills and Capacity Building
PP1	The possibility to recruit younger people for companies in rural areas, as an opportunity to strengthen the digital skills in companies was emphasised by stakeholders. There is a demographic change and de-population in rural areas, and lack of skilled personnel in the whole region.
PP2	Finland possesses the 1st position in human skills in Europe (DESI 2017). Improving the digital skills in utilising ICT solutions in companies or rural entrepreneurs is supported within projects (RuralDigiServ), but not directly from regional activities. Finns are familiar with digital services and opportunities of digital market and many individuals are ordering goods and services online (almost 60% of individuals), online banking (above 90% of the Internet users), and are active in social networks (about 60% of the Internet users). The Strategic Programme of Prime Minister of Finland Juha Sipila's Government (2015) with respect to digitalisation emphasise the importance of new learning environments and digital materials to comprehensive schools; electronic services, digitalisation and increasing availability of digital public services. Also, digitalisation has been affected by aging of society and SME owners. Kainuu region has a huge problem with a decreasing population (emigration) and aging society.
PP3	There are good examples in this area, such as actions carried out by the Ventspils Digital Centre or the Ventspils University College, DEMOLA network and INNOVUS by the recently created Department of Technology in the LIIA, ICT courses offered by LIKTA, as well as SME's and

	employees' training courses. Also, the Investment and Development Agency of Latvia supports commercialisation of research results (they currently support 10 research ideas that have potential to become business ideas). Yet, the cooperation among universities, students and SME should be increased. There is a deficit of highly skilled ICT specialists, and additional measures should be taken to stop the brain drain of the sector. Latvia has the lowest share of ICT specialists (2% vs 3.7% in the EU) and science and technology graduates (13/1000 vs. 18/1000 in the EU) than the EU average.
PP4	Cooperation between R&D with companies are not working; only separated activities provided by individual researchers exist in the framework of the development of the diploma work of the students; cooperation between the university and industry exist only on a personal level; Greek academic environment is not business-oriented. However, The University of Western Macedonia plays an active role in communication with and support of regional stakeholders. Lack of entrepreneurial spirit and competitiveness of SME´s; Brain drain that leads to a lack of skilled workforce and less initiatives for start-ups in the digital sector; Cooperation between SMEs and educational institutions is not established; the introduction and education in enterprising in schools is missing; Low competitiveness of SME´s; High level of unemployment – around 30%, about 70% unemployment of young people.
PP5	Presence of universities and scientific institutions in the region ensure availability of a skilled labour force for local entrepreneurs.
PP6	There is a weak link between businesses and universities, which weakens ICT tools' implementation for SMEs. Also, there is no obvious willingness by many SMEs to attend or participate ICT seminars, workshops, etc. The geographical dispersion of ICT to more SMEs could be also improved, while it is still at good levels. Another key challenge for rural SMEs is related to low digital skills of the management. Basic skills are needed to have a vision, to see the technological possibilities and innovate based on a perceived future demand, as well as to upgrade or recruit key personnel in and for the company. This will typically manifest itself as a lack of a digital strategy.
PP7	New study programmes were started and a college opened in Zadar, which will provide ICT specialists for businesses. The college is equipped with classes in which students learn robotics, technology and after graduation most of them continue to study at higher education institutions. The Croatian Ministry of Science and Education recognized the importance of ICT and will be implemented as a mandatory subject in school curriculum at latest in 2019. On the national, as well as regional level decision-makers, public officers and other stakeholders should be aware of new technologies and their impact. Specially designed regular training could be useful for that

	purpose. There are complaints that companies in Zadar have difficulties attracting highly qualified ICT specialists. At the same time, ICT specialists complain that there are not enough competitive job offers. There is also a lot of competition from the capital city of Zagreb, as well as from abroad resulting in the brain drain. Those who wish should be given an opportunity to stay in Zadar and work. In addition, girls could be more attracted for the ICT studies. (Less than 1/3 of students are women.).
PP8	There are several services for the ICT development at the Sofia Tech Park such as an incubator and the innovation forum and that the numerous players are willing to use the chances of digitalisation. Stakeholders emphasise that the brain drain leads to a lack of workforce and to less initiatives for start-ups in the digital sector, the lack of adequate infrastructure in buildings and the gap between research and traditional businesses. There is also an inefficient support for innovation and the challenge to develop a research university. Interventions are needed at all levels to solve problems related to the lack of necessary skills and digital exclusion.
PP9	The Aged population have less training and knowledge on the use of ICT tools. There is a high percentage of population that shows a lack of interest in ICT among people who do not use the Internet; Low ICT skills of companies from traditional sectors; Presence of the ICT implementation model in the field of education; Lack of adaptation of regulated training (University, Vocational Training) for the ICT market.
PP10	There is a good cooperation between the research sector and private sector particularly in the automotive industry. The OP provides finding possibilities for partnership projects between research organisations and private organisations. Hungarian universities provide studies in ICTs. There are several courses at major universities of good enough quality and there are also initiatives to disseminate dual training and to launch joint research with companies through ICT and in the robotics field. There is still a lack of ICT experts in Hungary, similarly as in other EU countries. In Hungary, there are several international and domestic consultancy companies providing expert postings as foreign-owned enterprises largely employparent companies' ICT solutions, and thus the experts mainly are coming from abroad. In West Transdanubia, there are a lot of initiatives to help SMEs become digital. Also, domestic SMEs are getting assistance from the Business Digitally Program.
PP12	The Moravian-Silesian region has an interesting mix of industries ranging from mining to ICT. The Technical University of Ostrava provides a great base for the innovation and lots of professionals for the local companies and the international companies are based in the region. There seems to be a connection between strong industries and a university level education. The region has successfully mastered the economical change and has a high employment rate, compared to many regions with similar challenges. At the same time, a number of entrepreneurs is still quite low. By supporting and promoting entrepreneurship, more innovation from the university could be produced. On the national level there seems to be a strong push for the e-Government and it also shows on the ICT priorities of the region. Also, a strong push for industry 4.0 can be seen on

a national level, as well as Ostrava, which has strong traditional industries. While the Technical University provides talent, the brain drain from the region is a real issue. Prague and work abroad are considered more attractive by young professionals, even though there are locally available jobs. Ostrava is progressing towards being a "smart city" and the attractiveness factor is being taken seriously. However, there is some unwillingness to adapt to the digital world on the local level.

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Source: Peer Review reports

Key findings focus on the **shortage of ICT skills and labour, demographic issues (population aging and depopulation), brain drain, as well as a mismatch between skills and demand where the educational offer influences the supply of skills**. Shortage of skills and labour relates to insufficient ICT skills of SMEs to take over digitalisation offers, lack of ICT specialists, as well as insufficient training and shortages in the school curriculum (Zadar). At the same time qualified ICT specialists complain that there are not enough competitive job offers on regional or rural levels. Brain drain that lead to lack of skilled workforce (WM, Zadar, Bulgaria, Ostrava) and demographic issues (Saxon-Anhalt, Castilla and Leon) seem to be the most acute problem for several partners. **The lack or insufficient cooperation between R&D, education and business organisations** has been emphasised by most of partners.

Partner	Table 2.4 Recommendations Section 2: Education. Skills and Capacity Building
PP1	This is important to inform younger people about the opportunities in the ICT sector in the region and focus on high-quality education to attract talents to this region. Regional scholarships for those studying IT-related subjects at Universities in Saxony-Anhalt are being recommended.
PP2	Create incentives for attracting students to keep them in the region: Kainuu region is one of the fastest aging regions in Finland and Europe. Thus, it is necessary to support young students and graduates to settle in the region, and limit emigration. Supporting (e.g. financing from OP) scholarships seems to be an efficient way of showing the potential and attractiveness of the region for young people, especially from ICT field. The recommendation can be connected with best practice from Latvia – Open Innovation „Demola Latvia ", where new ICT solutions for enterprises or scientific institutions are created by multidisciplinary teams of students.
PP3	Increase ICT skills awareness; Increase understanding about lifelong learning; Create recognizable certification for completed courses/trainings. Also, Universities should be encouraged to change schedules of classes to make them compatible with working hours, as it has been noticed that many students do not finish their courses as they find jobs easily in the sector before completing their studies, as there is a shortage of ICT skilled workforce in the labour market.

PP4	Interventions are needed for: 1) exploitation of the internet in order to meet the needs of the businesses; 2) creation of a positive digital environment for business in the sectors of information and communication; 3) awareness and training of businessmen about new quality improvement techniques and internationally recognised safety standards; organisation and administrative modernisation of the businesses and partnerships of public and private entities for the minimisation of the uncertainty implementation of research results; harmonisation of Greek legislation with European legislation; promotion of flexibility of the regional enterprises towards export trade; introduction of the business education in schools and the expansion of the training firms at schools.
PP5	Considering that cooperation between knowledge providers and businesses is a challenge, this is necessary to develop activities to support the cooperation among these institutions – e.g. by memorandum of cooperation, support of regional universities in placing the students in summer courses, inclusion of education of students in process/theory(?) into regional strategies, etc. This was recommended in order to utilise the potential of ICT for SME competitiveness improvement to liaise with projects bringing together the academia, businesses and intermediaries. For example, to encourage joint project generation and proposal writing between the academia and businesses. Also, this is recommended to utilise the talent retention project (or next round of similar projects) to link ICT innovation and their applications to SMEs.
PP6	An obvious solution would be more effective mentoring regarding ICT and advanced education levels and methods, which should be specifically designed for SME's environment and characteristics. They should include the need of Digital Development, as well as current and future ICT technologies and available tools. The increased level of involvement and participation of universities, research institutes and academia in the Development Innovation Policy, and the Digital Strategy should be a strongly recommended. Also, the creation of more effective channels in order to let SMEs be more involved in the ICT procedures would improve the overall situation. A wider usage of distance learning programs and webinars with good examples of ICT practices to a wider audience could be implemented along with an encouragement for traditional libraries to become more digital and get into the ICT age would also help. Furthermore, security improvement is also required, as well as digital skills improvement for ICT services and tools. Finally, extra care should be taken by regional authorities and councils to promote meetings and conferences between experienced entrepreneurs and young starters with advanced ICT skills. This would help ICT absorption and implementation in a more effective way, as well as renew the businesses and the business sector in general, to effectively help them become larger and grow faster.
PP7	Integrate ICT into school curriculum and make it mandatory; Education programmes should correspond to requirements of the digital age; Take over relevant good practices and experience

	from SKILLS+ partner regions, such as DARRA (Digital Age for Rural and Remote Areas), ST Online, E-leadership skills for SMEs, E-Skills Week and other, and adjust to own needs.
PP8	Analyse causes of the brain drain; Implement efficient cooperation among SMEs, institutions and clusters; Cooperate with educational institutions; Use the innovation forum for enterprises from the Tech Park, external ones and employees; Follow up on the approaches identified by the National Strategy for the Promotion of Small and Medium Enterprises 2014-2020, like to promote e-commerce, education and training, networking and cooperation etc., for the creation of new businesses and promote entrepreneurship; Introduce enterprise education in schools and expand training to all schools, including the School of the Arts for services and applications for SMEs, such as e- commerce, education and training, networking and cooperation etc.
PP9	More training for improvement of the ICT skills of the aging population should be organised; Awareness raising is the most important issue for SMEs – they should be aware of benefits provided by digitalisation, as well as understand the purpose of training and having ICT skills for company's employees.
PP10	Considering a good cooperation between the research and private sector would be recommended to involve students (fellowship of private sector) sharing their know-how, and the improvement of business (Knowledge Transfer Assistant).
PP12	Industry and ICT cooperation should be led by the University and innovation centers; cluster to cluster interaction; suitable tools for all levels of SMEs and industries focus should be towards the smaller SMEs with low R&D resources. The existing clusters should cooperate more to ensure that ICT solutions are penetrating all the industries to create growth.

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Source: Peer Review reports

Dealing with brain drain and demographic issues, as well as shortages in educational systems that lead to a lack of skilled workforce is certainly the most stressed dimension that emerge from a comparative reading of Recommendations. There are several options proposed by PR experts, such as **to inform younger people about the opportunities in the ICT sector in the region; focus on the high quality education to attract talents; regional scholarships and incentives for those studying IT-related subjects; introduce business and ICT education in schools; create cooperation among companies, schools and educational institutions; modernise educational programmes, make study programmes more flexible, distance learning, create recogniable certification for completed courses/trainings, take over good practices from other regions; analyse the causes of brain drain**.

Other aspects are related to **awareness raising, promotion of e-commerce, importance of life-long learning, security improvement for ICT tools, promotion of cooperation among entrepreneurs, and others**.

Partner	Table 2.5 Key findings Section 3: Favourable Business Environment
PP1	The region is lagging behind when it comes to broadband infrastructure (in rural areas). There are a lot of funding possibilities in the region and well-developed network between scientists, companies and stakeholders at the regional level. There is a cluster located in the region (the IT-Cluster of Central Germany). Application processes take a long time, but they are not yet digitalized.
PP2	The ICT sector in Kainuu is mainly comprised of SMEs and micro-enterprises providing software solutions for businesses. One of priority areas of the region is attracting FDI for establishing data centres. There are few companies providing B2C and B2B ICT services and some software development companies mainly involved in subcontracting. The regional telephone co-operative has played a big role in providing connectivity and server infrastructure. Since the Kainuu University of Applied Sciences offers education in the gaming software development, this emerging sector has a good development potential – more than 50 companies have registered in this sector over the past 5 years. Also, Kainuun Etu and Kainuun Regional Office play an important role in securing a favourable business environment. Finland has national level programmes, such as Digiboosti, to improve the digitalisation, which offers support for SMEs to employ ICT professionals for increasing the innovation potential of companies. In addition, on the regional level (Kainuu) there are three ongoing projects supporting innovation and use of digital tools in SMEs: DiHyTe project; Kasvua Kainuuseen; RuralDigiServ project.
PP3	The LIIA (Investment and Development Agency of Latvia) has created a Department of Technology, and the Start-up Law has been published. Also, the RIS3 and the National Industrial Policy of Latvia 2014 – 2020 support ICT and businesses. The LIAA is focused not only in SMEs but also in motivating ICT university students to become entrepreneurs and engage with the needs of SMEs, as well as be oriented to solve real problems in bridging the gap between the market and researchers. To do so, they carry out soft activities, business incubators, and the INNOVUS festival to support innovation. Nevertheless, there should be specific measures for SMEs to uptake ICT in their day-to-day activities. One of solutions could be to appoint representatives of the Regions to carry out specific "simple and slow" trainings for SMEs.
PP4	There are ICT and digital developments in RWM, such as the development of broadband connectivity infrastructure; the national actions Digi-Content, Digi-Lodge and Digi-Retail. Also, the ROP 2014-2020 provides a supportive framework for increasing the use of ICT and achieving higher productivity in the economy. The **RWM** has also worked on the development of the RIS3 following the EUROPE 2020 strategy. However, there are no innovation hubs developed on a regional level. **Regional Development Agency of WM** implements programmes focused

	especially on tourism development, promotional activities and marketing and focus on traditional manufacturing support.
PP5	Favourable business environment, special economic zones, innovation and entrepreneurship support centres (i.e. technology parks) and cluster initiatives, such as the Digital Entertainment Cluster, provide necessary conditions for the business development in the Region. However, insufficient innovation potential, complicated regulations and difficulties in obtaining funding for high risk investment are major obstacles for business and digital development. The following factors are crucial for the ICT development and digitalisation: widespread broadband Internet connectivity, i.e. access of inhabitants and enterprises to broadband infrastructure; high e-skills of inhabitants and employees, availability of IT professionals; availability of private and public e-services; favourable business environment supporting SME's innovation. In addition, the support of project applications prepared by SMEs from rural areas are promising how to increase the usage of ICT among SMEs in rural areas.
PP6	Digital innovation and development are priorities of the Sør-Trøndelag policymaking, which make a positive impact on the business environment. In addition, there is a strong technological environment with The Norwegian University of Science and Technology and the large R&D company SINTEF in the lead in Trondheim. Also, there is a noticeable presence of the oil industry through Statoil's R&D centre. Trondheim is often namedthe main centre of technology in Norway. A lot of development activities have been seen important in promoting ICT in small companies in rural areas. These developments include: Support to SMEs; Implementation of state measures for innovation and development; Grants and loans for competence development; "Digital Norway" initiative; Efforts for continuous education; Emphasis on Web Seminars; e-Trondelag; Intermediary organizations that play an active role in fostering ICT.
PP7	Incubators and co-working platforms are very useful support instruments for business development. Support for local businesses, including the ICT uptake by SMEs is evident and should also continue with the implementation of the Business Support Organization's Network.
PP8	Bulgaria, especially the Sofia district, has a high number of top Multinational ICT corporations in Eastern Europe (HP, SAP, Johnson Controls, CISCO). The presence of the IT multinational corporations help ICT businesses easily access top-notch technologies at affordable prices. Furthermore, the ICT Cluster Bulgaria on the national level and the Sofia Tech Park in the regional level are good examples of bringing different branches and companies together. The BCCI play an active role in the policy-making process in Bulgaria and participates in a number of decision-making, advisory and control committees and working groups related to the adoption and changes of legislation.

PP9	Presence of a region-wide administrative structure (e.g., local and provincial governments) and other consolidated initiatives for the ICT-related support for small-scale local entities. One of the biggest drawbacks for the ICT uptake is related to high costs of ICT equipment, lack of funds and external financial resources. Infrequent use of ICT in the company's management and large imbalances in the use of ICT depends on company size. Intermediary organisations (such as Chambers of Commerce, Business Associations, innovation agencies) play an active role in fostering ICT and digitalisation in the region like ADECOCIR, and Chamber of Commerce and Industry of Valladolid. Clusters, accelerators, science parks and other innovation hubs, however, do not play crucial role in the digitalisation process of the region. There is a super computing infrastructure system in León according to the national plan of digitalisation, which isn't used effectively and efficiently at the moment.
PP10	The presence of favourable business environment has been particularly emphasised by a presence of well-known international brands in the region. The key specialisations sectors are: Machine industry, car industry, electro mechanics; Forestry and wood industry; Health, thermal; Logistic; ICT; Agriculture. ICT is considered as the Key Enabling Technology, and as such a cross-cutting key specialisation sector. "Do Business Digitally", financed by the Policy Instrument, is a great example of how to help SMEs with the first digital step.
PP12	The ICT uptake by SMEs in the Moravian Silesian Region is facilitated by locating a publicly available IT4IN super computer in the region. In addition, businesses of the region possess unique knowledge and competencies, resulting from the high concentration of the industry in the value chain "Coal-Steel-machine", which can be applicable for promoting new economic sectors (automotive, engineering, IT, measuring technologically advanced materials, mechatronics and robotics, environmental technology, energy savings, etc.), as well as promote investment in research and development. The Ostrava city with presence of the Technical University (VSB–TUO) has established necessary infrastructure for supporting innovative businesses. During the last programming period (2007-2013), many science parks and innovation hubs have been built, many of them are still present and supported by public funds. The Ostrava city created the plan "Integrated Territorial Investment of Ostrava" agglomeration to be implemented with the assistance of EU funds.

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Source: Peer Review reports

The most important indicator that emerges from the comparative analysis of the presence of a Favourable Business Environment is the strong **variability of the presence of SME support organizations/instruments, including support for SMEs digitalisation**. As the most important support instruments **clusters, networks, incubators, co-working platforms, technological and science parks, region-wide administrative structures, grants and loans for competence development, special measures and initiatives, intermediary organizations, Chambers of Commerce, business associations, innovation agencies, special economic zones, accelerators,**

super computing infrastructure have been mentioned. Support instruments/programmes for digitalisation are especially evident in Kainuu Region. Presence of multinational corporations (Bulgaria, WP, Malopolska) is another indicator emphasising a positive impact of favourable business environment. The experience of Sør-Trøndelag indicates that setting the digital innovation and development as a priority for the regional policy, as well as a presence of technological environment, greatly stimulates digitalisation of businesses.

Among other issues **shortages in broadband infrastructure, lack of information about support instruments and funding possibilities, non-digitalized application processes, lack of internationalization, brain drain, lack of training, high costs of digitalisation, insufficient innovation potential of SMEs** are noted. One of crucial finding is that intermediary organizations, such as Chambers of Commerce (Castilla and Leon) and others, don't participate in SME digitalisation processes actively enough.

Partner	Table 2.6 Recommendations Section 3: Favourable Business Environment
PP1	Speed up the investment in broadband infrastructure in rural areas for further development of both, networks and clusters, to secure that smaller rural companies are also included. Also, look into the application processes and consider possibilities to digitalize them.
PP2	Create & implement development strategies for the use of ICT in SMEs. It is necessary to create such strategies for SMEs with consultancy for the owners/managers. Implementation of development strategies for SMEs should be co-funded from public sources and consultancy or advisory should be proposed for SMEs. Digitalisation related issues should be the most important within the strategy of companies.
PP3	There should be specific measures for SME to uptake ICT in their established day-to-day activities.
PP4	Establishment of the clusters, possibly business support organisations; Raising awareness among SMEs on possibilities, increase of cross border trade.
PP5	Pre-commercial procurement: Support the innovativeness and competitiveness of the ICT industry in Malopolska through pre-commercial procurement solutions; Consider linking the development of the ICT sector to the demand-led solutions that the pubic sector will adopt; Adopt the concept of pre-procurement innovation. Assign an external expert to list the quality and protocol criteria that the public sector digitalisation will have to fulfill within the EU context. For example, e-Government could be selected; Get ready for new challenges connected to the EU public sector digitalisation; cooperate closely with researchers and IT specialist (IT4 innovation – research capacity finance by OP 2007-2013 – good practice from Ostrava). Improvements in e-infrastructure are citical preconditions for digitalisation of businesses.
PP6	Another step towards improvement could be the diffusion of ICT culture and infrastructure to more SMEs, located in distant places and regions. The increased geographical diffusion of ICT

	culture and infrastructure could improve the whole situation regarding ICT usage and levels of SMEs.
PP7	Consider developing one stop shops, help-desks, client service centres, and such. based on already available and newly created infrastructure in the cities (Zadar) and rural areas to reach all target groups including SMEs. In addition to infrastructure improvements, introduce non-monetary support measures, such as seminars, training, consultations, including on-line courses. Provide training for trainers to assist inhabitants, including entrepreneurs, change their thinking for a long-term use of ICT tools in business, as well as daily life.
PP8	Use all capacities of the Sofia Tech Park (employees, devices, institutions); Facilitate efficient cooperation among SMEs, institutions and clusters; Activate exchange between research and traditional businesses; Activate cooperation between SMEs especially in rural areas and all actors on regional level; Identify technology areas in rural areas.
PP9	New initiatives for better use of the existing super computer in León; The coordination between national and regional level institutions should be improved.
PP10	New approaches such as open innovation in connection with the introduction of modern ICT tools should be promoted. The logical Next Step is to promote the activities of the ICT cluster, as well as to improve management to use a full potential of the Internet.
PP12	n/a

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Source: Peer Review reports

The recommendations are in line with the observed strong variability in the provision of dedicated (intermediate) structures and organizations. Recommendations indicate that **more specialized intermediary or support structures should be created tackling digitalisation of SMEs, such as clusters and networks involving smaller rural companies (Saxony-Anhalt, WM), new business support organizations (WM); one stop shops, help desks, client service centres (Zadar); increased geographical diffusion of ICT culture and infrastructure (Sør-Trøndelag)**; **capacities and advantages of already existing institutions should be better exploited (Bulgaria, Castilla and Leon); additional non-monetary support measures should be explored and implemented (Zadar); strategies for the use of ICT in companies, consulting and public co-financing should be ensured (Kainuu); non-commercial procurement solution (Malopolska); specific measures for SME to uptake ICT in their day-to-day activities (Latvia)**.

Similarly, as within previous recommendations, the **importance of broadband infrastructure in rural areas, presence of clusters and networks, digitalisation of application processes, better coordination and cooperation among responsible institutions and businesses** have been emphasised.

Partner	Table 2.7 Key findings Section 4: Partnerships and Networking
PP1	Stakeholders of the Skills+ project seem to be well informed and partnerships are well organized. However, the Ministry of Education hasn't been involved in this partnership. Also, networks linked to the lead markets seem to be well organized. When it comes to the links between the federal and regional level some improvements have been noted.
PP2	The ICT sector in Kainuu is mainly comprised by SMEs and micro-enterprises providing software solutions for businesses. One of priority areas of the region is attracting FDI for establishing data centres. There are few companies providing B2C and B2B ICT services and some software development companies mainly involved in subcontracting. The regional telephone co-operative has played a big role in providing connectivity and server infrastructure. Since the Kainuu University of Applied Sciences offers education in the gaming software development, this emerging sector has a good development potential – more than 50 companies have registered in this sector over the past 5 years. In addition, partnerships and networking take place within the framework of national level programmes, such as Digiboosti, and regional projects (DiHyTe; Kasvua Kainuuseen; RuralDigiServ)
PP3	As it happens in other participant regions, competences regarding ICT are fragmented within different bodies. To solve the fragmentation problem and improve cooperation between responsible institutions, the Innovation Council was created in 2015. There are strong umbrella organizations supporting the Latvian ICT enterprises, such as the Latvian Information and Communication Technologies Association (LICTA) and the Latvian IT cluster. There are clusters also forming in other big cities and the accelerator is under implementation. The cluster development has been strongly supported during current and previous programming periods. At the same time, there is still a lack of cooperation between companies.
PP4	Cooperation between R&D organization and companies does not work, except individual activities provided by individual researchers in the framework of the diploma work of students; Cooperation between the university and businesses exist only on a personal level; Greek academic environment is NOT business oriented; No cooperation between SME`s and research and education institutions, only exceptional cases; Lack of communication between the traditional business and the digital business; Clusters, accelerators, science parks and other innovation hubs are not present, there is no such institution in Western Macedonia, only in Thessaloniki, Central Macedonia.

	University of Western Macedonia focuses on supporting activities of: students and graduates; cooperation of big companies and SME´s; implementation and coordination of projects; Technical Educational Institute of Western Macedonia: Implementation of projects; Support of SMEs by development of diploma works of students – there the cooperation and support of family farms are provided; new technologies testing. The Regional Development Agency of Western Macedonia implements programmes focused especially on tourism development, promotional activities and marketing, as well as traditional manufacturing support.
PP5	Cooperation among stakeholders and policy makers has been considered an essential factor for making policy improvements.
PP6	In Trondheim, main actors creating a strong ICT environment are mainly associated with NTNU (Norwegian University of Science and Technology) and new technologies. The Faculty of Information Technology, Mathematics and Electrical Engineering with its six departments, plays a key role for ICT development. These departments also offer interesting laboratories for testing new technologies, such as ROBOTNOR or Unmanned Aerial Vehicles Lab (UAV-Lab). However, there is a weak link between businesses and universities, which weakens ICT tools' implementation for SMEs.
PP7	There is a good cooperation and networking between organizations and businesses of Zadar. At the same time, organizations on the national level, as well as national and regional level organizations are lacking coordination related to the implementation of digitalisation initiatives (strategies, action plans, etc.). There is not a joint action plan worked out that includes all major actions to be implemented. On the local level, there is a lack of cooperation platforms, networks and/or clusters to facilitate communication between ICT companies.
PP8	In the Sofia district, there are several institutions with regard to ICT and digitalisation as a good basis for partnerships. In addition, there are interactions between facilities inside the Sofia Tech Park. During the workshop the stakeholders stressed out the lack of communications among university, Sofia Tech Park and SME`s though. Stakeholders also pointed out the gap, as well as the lack of communication between research and digital and also traditional businesses.
PP9	The regional authority plays active role in the digitalisation of the region and works in close cooperation with local stakeholders; Availability of many interesting and useful projects aimed at digitalisation (e.g. Smart City, ADE rural, Digital CyL); Complicated structure of the management system in the public bodies dealing with EU funds absorption, which affects the ICT development; Lack of network capillarity in the region for companies and economic activities related to ICT and excessive disintegration of projects; More than 2000 municipalities exist in the region, too complicated and difficult system of coordination.

PP10	The OP offers some calls dedicated to clusters, precisely to clusters that meet the quality criteria. However, there is no explicit cluster policy, nor national or regional funding for cluster development.
PP12	The Moravian Silesian Region is a member of several associations and clusters. However, the cross-industry co-operation between ICT and other industries is low. Still, the SME's Association provides a wide range of activities to support usage of ICT as a tool. Business networking through the Enterprise Europe network is supported though a local Chamber of Commerce. Taking over good practices, especially related to improving digital skills of citizens, entrepreneurs and employees of SMEs have been emphasized.

Legend: PP1=Saxony-Anhalt; PP2=Kainuu; PP3=Latvia; PP4=Western Macedonia; PP5=Malopolska; PP6=Sør Trøndelag; PP7=Zadar; PP8=Bulgaria; PP9=Castilla and Leon; PP10=West Pannon; PP12=Ostrava.
Source: Peer Review reports

The strongest focus emerging from the comparative analysis on the partnership and networking theme is on the **insufficient collaboration between businesses, R&D and education organizations, as well as cooperation among companies** (Saxony-Anhalt, WM, Bulgaria). PR experts have noted that this would be important to involve the regional Ministry of Education in the stakeholders' network, while Western Macedonia (WM) recognizes that at the Greek academia is not business oriented. The **lack of coordination for implementation of digitalisation initiatives** was noted in the case of Zadar County. Also, there is a **lack of regional level cooperation networks, platforms and/or clusters** (Zadar, Latvia). The SMEs digitalisation is also affected by **complicated procedures of EU funds absorption, fragmentation of responsibilities between responsible institutions, lack of networks among regional organizations and complicated system of coordination**. At the same time, **cooperation between stakeholders in order to change policy and improve situation has been considered as essential**.

Nevertheless, a **good basis for partnership** already exists, which must be further developed (Zadar, Bulgaria).

Partner	Table 2.8 Recommendations Section 4: Partnerships and Networking
PP1	Better co-operation between ICT-companies and the educational system at all levels.
PP2	Intensify cooperation between SMEs and scientific institutions: "Silicon Valley of the North" – Oulu region is a good example of effective cooperation of universities, research centres and technology parks. It will be a good method to improve efficiency of Kajaani University Consortium, which is a consortium including the University of Eastern Finland, University of Lapland, University of Jyväskylä and University of Oulu as a networked academic community focused on scientific research, university teaching and community relations. Establish a local business incubator or a cluster together with universities and local stakeholders. Such incubator or cluster will be a place to work together for SMEs from different sectors in order

	to implement ICT solutions for other kinds of businesses and as a way to build an ICT industry community in order to keep and attract young professionals in the region. The recommendation is connected with the best practices from Croatia – Innovative Zadar; Germany – Cluster IT-Mitteldeutschland and Latvia – Ventspils Digital Centre.
PP3	Necessity to promote associative movements among SMEs to strengthen their capacities or sharing experiences should be emphasised (i.e. clusters).
PP4	Focus on cooperation between SME`s and research and education institutions; Introduction of business education in schools to present the praxis; Focus on cooperation between SME´s, cluster establishment; Present success stories to SMEs.
PP5	Link rural SMEs to one common platform that can effectively facilitate exports and/or increase operational capacity: select rural SMEs that 1) have already shown production capacity potential; 2) in this group select those that have an e-mail, if not, add one action for SMEs to get e-mails; 3) describe profiles of SMEs and their potential; Enhance the cooperation between SMEs and Research organisations (CZ best practice) using ICT tools and financial resources from ROP of Maloposka; Agree to set up such a platform (can be even at national level) or link to an existing one (Good practices of Kaninuun Etu abd Belgium – GOLLI); Formulate project based on 1+2 , and approve for the Action Plan (MA). In addition, there should be stronger promotion of clusters by public institutions to ensure support for businesses through clusters and technology centres.
PP6	Extra care should be taken by regional authorities and councils in order to promote meetings and conferences between experienced entrepreneurs and young starters who have advanced ICT skills already. This measure would help ICT absorption and implementation at a more effective way, renew the businesses and the business sector in general and help them become larger and grow faster and more effectively.
PP7	Ensure coordination of digitalisation related initiatives and strategies to avoid any duplication and misuse of funds. Try to involve all main government and regional organizations in the digitalisation processes. For example, establish Digitalisation Council on national and/or regional (Zadar) levels or alternatively review the mandate of the already existing Council. Promote creation of cooperation platforms, networks and clusters to facilitate communication and cooperation between companies.
PP8	Develop cooperation for innovation between enterprises and academia; Show best practices and success stories to the SME's; Support development of environment and research, as well as innovation infrastructure for business needs; Inform about the possibilities offered by the Sofia Tech Park.
PP9	The partnership between regional authorities and clusters/incubators should be fostered.

PP10	West Pannum Region might connect clusters and business chambers to have more joint initiatives, and feasibility studies for implementation (best practice of Kainnum). Pannum Novum might provide project concepts (package of interventions) for the applicants of the OP. The Managing Authority in cooperation with Pannum Novum might evaluate the selected projects and monitor the results.
	Cluster strategy should be provided by the Pannon Novum region and relevant intermediates. In this case, taking over the good practice from Spain could be considered.
	Technology transfer and cooperation between the Academia and the private sector resulting in the knowledge transfer is essential. In this case, the Knowledge Transfer Assistant good practice from the Czech good practice could be considered for taing over by the regional authority.
PP12	Taking over good practices, especially related to improving digital skills of citizens, entrepreneurs and employees of SMEs have been emphasized.

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Source: Peer Review reports

Recommendations are consistent with Key Findings of this section. First of all, **improving and/or intensifying cooperation between businesses, R&D and education institutions, as well as promoting exchange and collaboration among businesses, including cooperation with and within clusters** have been recommended for Saxony-Anhalt, Western Macedonia, Kainuu, Sør-Trøndelag, West Pannon and Bulgaria. Acknowledging that R&D and educational institutions are an integral part of business incubators and clusters, the recommendation to improve cooperation between businesses, R&D and education institutions is also relevant for Zadar County, Kainuu, as well as Castilla and Leon.

Some focuses also emerge on **promoting business education, presenting best practices and success stories to SMEs** (WM); **better coordination of digitalisation initiatives and strategies** (Zadar). This has been recommended **to establish a Digitalisation Council on national and/or regional levels or alternatively review the mandate of the already existing Council** (Zadar County). In the case of Malopolska, PR experts recommend **linking rural SMEs to one common platform that can effectively facilitate exports and/or increase operational capacity**.

Partner	Table 2.9 Key findings Section 5: Access to Finance
PP1	There are a lot of funding possibilities in Saxony-Anhalt, but the consulting structure regarding the funds is very complex.
PP2	Availability of funding through European, national & regional funds.

PP3	The LIIA provides financial support to business and start-ups, as well as to researchers through vouchers, grants and tax discounts. Recently they have found that the more financing was provided, the more difficult it was for SMEs to apply for it. Thus, they are strongly considering reducing the amount of money granted for future calls (i.e. from 25.000€ to 5.000€). In addition, LIKTA provides financial support for training programmes, offering SMEs a possibility to train their employees by co-financing 30% of their costs. More activities should be foreseen to ensure future financial resources considering that up to now most initiatives are financed by EU funds.
PP4	Broadband connectivity infrastructure (2007-2016) is supported by ERSF, OTE SA and other private companies. The national action Digi-Content supported Greek enterprises to develop ICT and was funded by the intermediate body "Digital Aid S.A." within the framework of the "Digital Convergence" Operational Programme (OP-DC) of the National Strategic Reference Framework 2007 – 2013 (NRSF 2007 – 2013). The national action Digi-Lodge supported the Greek hotel sector to develop ICT in order to establish promotional websites and online reservation systems, funded by the intermediate body "Digital Aid S.A." within the framework of the "Digital Convergence" Operational Programme (OP-DC) of the National Strategic Reference Framework 2007 – 2013 (NRSF 2007 – 2013). The national action Digi-Retail supported Greek retail enterprises to develop ICT in order to implement investment plans on general digital investments, and was funded by the intermediate body "Digital Aid S.A." within the framework of the "Digital Convergence" Operational Programme (OP-DC) of the National Strategic Reference Framework 2007 – 2013 (NRSF 2007 – 2013). ROP 2014-2020 provides a supportive framework for increasing the use of ICT and achieving higher productivity in the economy.
PP5	The importance of ROP 2014-2020 and Operational Programmes 2014-2020 (Digital Poland; Smart Growth; Knowledge, Education and Development) funding have been emphasised: the call criteria for funding projects must be of high quality to reflect the objectives for making policy changes in the first place; calls to foresee cooperation with qualified, knowledge intensive institutions that can reliably facilitate implementation; Malopolska might provide set of case projects eligible for funding from ROP to support beneficiaries from rural areas. At the same time complicated regulations and difficulties in obtaining funding for high risk investment were noted as major obstacles for business and digital development.
PP6	n/a
PP7	This is a common problem for SMEs to get financial support for the ICT uptake. Also, commercial loans and investments are hardly accessible for SMEs, especially without ERDF grant support. There is an open discussion about using financial instruments rather than grants. In some cases, grants could be more easily to absorb, as well as attract additional commercial funding and investment.

PP8	The following different sources of funding that are employed to support the implementation of the strategy for digitization are: Financing the use of digital tools and innovation activity of the enterprises; JEREMIE (improvement of SMEs access to financing through different financial engineering instruments); Eleven (accomplishing about 200 investments in innovative starting businesses); LAUNCHub (making investments and support for starting companies from Bulgaria and the region). However, it has been demonstrated that Bulgaria should maintain sufficient conditions for the access to public funds by reducing administrative barriers in receiving public funding (see National Strategy for the Promotion of Small and Medium Enterprises 2014-2020).
PP9	Financial support provided by the Institute of business competitiveness (ICE) (ERDF co-funding) including Aid to promote innovation (innovation voucher), incorporation of ICT in SMEs (ICT+ transfer voucher), Aid for the development of the ICT industry; Aid for investment projects of SMEs, Aid for entrepreneurs, Aid for R&D projects. Financial support provided by the General Directorate of Industry and competitiveness Existence of Entrepreneurship and Innovation network that provides 112 measures in support of Entrepreneurship and self-employment; Competitiveness and rural entrepreneurship; Sectorial specialization; Innovation and technology transfer.
PP10	In order to support small companies from rural areas that are less prone to applying for funding from the programme than medium-sized businesses from the Budapest capital region, the governance of the programme should be improved. This could include the introduction of more SMEs using ICT in their day to day business activities, which would benefit small rural areas' companies' funding applications. It should also encompass better information and consultancy services available to SMEs in order to enable them to better identify ICT potentials and to propose better projects (CZ good practice). To make sure that the available funding is spent as efficiently as possible, the programme's scope should be expanded to give more attention to state of the art technologies such as cloud solutions and services for mobile devices. In addition, new approaches such as open innovation in connection with the introduction of modern ICT tools should be promoted (CZ good practice – cooperation with R&D institution).
PP12	The access of finance has been mainly ensured through the Operational Programme Enterprise and Innovation for Competitiveness, Priority Axis 1: Development for Research and Development for Innovations, Specific Objective 1.2: Increase of intensity and effectiveness of co-operation in research, development and innovation

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Source: Peer Review reports

The comparative analysis of key-findings related to Access to Finance highlights the **presence of significant financial resources for digitalisation in partner regions**. Availability of public and EU funding and variety of programmes has been noted by PR experts for Saxony-Anhalt, Bulgaria, Castilla and Leon, Latvia. In case of

Western Macedonia presence of public and also private funding for digitalisation has been noted. However, there are **problems in absorption of funding related to lack of information, complicated administrative procedures, low capacity of rural SMEs, barriers and non-digitalisation of applications** (Bulgaria, Saxony-Anhalt, Castilla and Leon, Zadar, West Pannon). In addition, PR experts of Zadar have reported problems for businesses accessing funding for digitalisation, while PR experts for Latvia reported on difficulties for SMEs to apply for calls providing larger financial resources and unclear possibilities for access to finance when the EU provided funding will end.

Partner	Table 2.10 Recommendations Section 5: Access to Finance
PP1	Provide more information about the possibilities for funding.
PP2	Simplify access to financial support/instruments for SMEs. Complicated (time-consuming) and prolonged assessment of SMEs proposals in calls for gaining support from public funds (especially EU funds) is one of the most important barriers preventing utilization public funds in good way. Thus, easier and faster evaluation process of proposals and continuously-opened calls for proposals should be proposed for implementation. It is especially important for small grants for SMEs, which should be provided quickly to the beneficiary.
PP3	Reduce negative perception of EU regulations and documentation; Find solutions for the funding gap between EU programming periods; Shorten funding cycle for SMEs.
PP4	Use ROP 2014-2020 to increase the use of ICT; Continue in utilisation of subsidies provided by the private sector.
PP5	n/a
PP6	n/a
PP7	Continue developing new financial instruments, such as accelerators, to target innovative, hi-tech and fast-growing companies. Keep available support options for micro and small enterprises acknowledging their importance, especially for rural and hard to reach areas.
PP8	Use funding possibilities like the OP Innovation and competitiveness 2014-2020; Use ERDF for building adequate infrastructure; Finance technologies and innovation activities of the enterprises; Provide financial support for development of environment and research as well as innovation infrastructure for business needs; Provide financial support for innovation in enterprises; Develop cooperation for innovation between enterprises.

PP9	More funds to be designated to improve the connectivity of the rural areas of the region and in the cross-border area with Portugal. Increase the awareness raising campaigns for SMEs in order to promote the available financial funds.
PP10	Use Innovation voucher – to speed up the procedure (similar concept as Do business Digitally project); The call criteria for funding projects must be of a high quality to reflect the objectives for making policy changes in the first place. Calls to foresee cooperation with qualified, knowledge intensive research institutions that can speed up the restructuring of business operations and intensify ICT usage.
PP12	Provide case projects to support new project proposal from the Policy Instrument and enhance cooperation between R&D organisations and SMEs.

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Source: Peer Review reports

The comparative analysis of the Recommendations firstly highlight the **importance of using funding of regional Operational Programs and ERDF funding for SMEs digitalisation** (WM, Bulgaria, Latvia). At the same time, **negative perception of EU regulations and documentation should be reduced, and solutions should be found on how to reduce the funding gap between EU programming periods**. Also, **alternative approaches, i.e. shortening funding cycle, should be found to make application procedures easier for SMEs**.

Especially important, is to attract and use private financial resources as indicated by the PR experts of Western Macedonia. Use of funds is also related to recommendation to Zadar County – **to continue developing new financial instruments, such as accelerators, to target innovative, hi-tech and fast growth companies.** At the same time, **specific support options for rural SMEs digitalisation, including the use of innovation vouchers, must be envisaged.** Also, access to finance should be improved by **the simplification of application procedures, especially for SMEs** (Kainuu).

Secondly, recommendations related to Access to Finance target objectives of funding, where **improvement of connectivity and infrastructure** are among the top priorities followed by **supporting technologies and innovation activities of enterprises; development of environment and research as well as innovation infrastructure for business needs; financial support for innovation in enterprises** (Bulgaria). The importance of **distributing information about financial perspectives** has been stressed in Saxony-Anhalt and Castilla and Leon.

Partner	Table 2.11 Key findings Section 6: Administrative and Technical Issues
PP1	High bureaucratic effort in applying for and accounting for funds.
PP2	n/a

PP3	Infrastructure is the main problem when tackling ICT. According to the overall connectivity dimension of the Digital Economy and Society Index (DESI 2018), Latvia ranked 10th. Latvia's position of fixed broadband coverage of households is still lagging behind the EU average. Rural households having access to internet by broadband connection are 75% (2016) of all households. The overall goal, namely to ensure the availability of high-speed broadband network access everywhere, including in scarcely populated, remote territories, where telecommunications providers lack commercial incentive, should be further pursued. According to the DESI 2016, the overall progress is driven by increasing shares of fast broadband subscriptions, as well as by the improved delivery of public services. More and more Latvians are going on-line and using e-Government services. However, none of the SMEs interviewed had applied for any grant fostering digitalisation. Only Diana's Candle asked for the assessment to Ventspils Digital Centre to develop a new line of Candles using 3D modelling. In the case of ARBO, they would rather ask the LIIA for help if necessary than any other organization. Also, it was pointed out that the public administration had to overcome drawbacks, like bureaucracy. The length oftime for administrative procedures to be completed was too long and not suited to fast, market changes. They also asked to break the vicious cycle where SMEs are not demanding simple solutions, and companies working on ICTs don't develop them as they have no market.
PP4	The extent of ICT use by SMEs is considered static in recent years, unsatisfactory and with low IT maturity. Demand for ICT products and services in Western Macedonia are extremely low, due to low income and the lack of digital skills in the population. Access in remote and rural areas still remain restricted due to high costs resulting from both low population density and distance. Wireless networks can bridge the digital gap since these networks require a lower need for technological investments. To cover the demand for broadband access of the most isolated regions could be achieved by: Broadband coverage up to the most distant rural locations; Supporting Local Government's Broadband Service; Provision of Public Services even to the most remotely located citizen; Supporting entrepreneurship by creating new firms based on wireless technology; Encouraging innovation and creating employment opportunities; Familiarizing citizens in remote and rural areas with new technologies; Making broadband services available to remote and rural areas support local. Experiences from the peer review were: Coverage of the remoted and peripheral areas is the main problem, especially due to high costs. However, there are local initiatives, supported by local administrations using the wireless networks (Nestorio Municipality).
PP5	The MA must allow a slot in their regional policy decision-making for project-generated policy improvements; project concepts (package of interventions) should be available; acceptance of the package in principle by all required parties; feasibility studies for the implementation, including project types, costs and criteria; acceptance of the results of the feasibility plans by

	both the Regional Innovation Strategy and the ROP 2014-2020; issue of ROP 2014-2020 calls; selection, implementation and monitoring of individual projects.
PP6	n/a
PP7	Lack of capacity (skills, experience) of regional and local administration bodies to prepare projects to get co-financing are important drawbacks for the implementation of high-speed broadband network. There are also particular risks associated with the absorption of EU funds behind schedule such aschallenges & risks for implementing the ICT infrastructure. Businesses complain of too much paper work, administrative burden and bureaucracy. In addition, e-signature, as well as electronic application in many cases aren't accepted by state and local organizations. Another problem faced by SMEs, especially, micro and small enterprises is related to insufficient capacity to write applications to get funding (EU and local). On the other hand, many SMEswould be capable to apply for EU funding if applications were simplified. However, this is important to evaluate capacity of micro and small enterprises to find the right approach for all types of companies, which need support.
PP8	The region has the second fastest broadband in the world and the share of enterprises with broadband internet connection has increased. Total for Bulgaria, 90% of the population has access to broadband Internet, but the difference between the regions is significant - less than 60% of the rural populations have access to this service. Thus, it also slows down business development in these areas.
PP9	The absorption of EU funds has delays, which create problems also for the ICT uptake. Complicated structure of the management system of public bodies dealing with EU funds absorption, affect ICT development. Resistance to change and insufficient internal coordination among public institutions for ICT application remains a challenge.
PP10	n/a
PP12	n/a

Legend: PP1=Saxony-Anhalt; PP2=Kainuu; PP3=Latvia; PP4=Western Macedonia; PP5=Malopolska; PP6=Sør Trøndelag; PP7=Zadar; PP8=Bulgaria; PP9=Castilla and Leon; PP10=West Pannon; PP12=Ostrava.
Source: Peer Review reports

SMEs in Europe are characterised by a predominance of small enterprises, representing 99% of EU businesses. Therefore, most of them are facing administrative burdens that are typical for small companies. This is also reflected by Administrative and Technical Issues section in Key Findings. In most cases, complaints are about how **complicated and slow administrative procedures in accessing support and financing, especially EU funds' resources for digitalisation**. In this respect, the **development of broadband infrastructure, connectivity**

and access to the internet are being emphasised (WM, Zadar, Bulgaria, Latvia). Another drawback mentioned under this section refers to the **lack of skills in relation to both, entrepreneurs and also administrative bodies** (WM, Zadar), **complicated and too slow administrative procedures and a lot of paperwork** (Zadar, Castilla and Leon, Latvia), **delays in absorption of EU funds** (Zadar, Castilla and Leon). According to PR results in Bulgaria, despite having ultra-fast broadband and access to internet by majority of population, there can be **significant differences in accessibility across the regions and, especially, in rural areas**. In addition, SMEs are lacking simple digital solutions, which aren't developed by ICT companies as they don't see a lot of demand on the local market (Latvia).

Partner	Table 2.12 Recommendations Section 6: Administrative and Technical Issues
PP1	Reduction of bureaucratic obstacles.
PP2	n/a
PP3	Ensuring the availability of high-speed broadband network access everywhere including in scarcely populated, remote territories, where telecommunications providers do not see any commercial incentive, should be further pursued. In addition, improve and speed up administrative procedures, promote cooperation with companies trying to match needs of SMEs with offer provided by local ICT companies.
PP4	Provide support for local initiatives; Use ERDF for building adequate infrastructure; Provide educational and training activities for users.
PP5	Improve digitalisation of rural SMEs through targeted actions: Prepare nice and clear feasibilty study (Kainuun Etu and ZC can proivide assistance); Through the feasibilty study, identification of digitalisation focus for different industries, i.e. grouping of digitalisation potential and priorities can be done; Approve some of those funds for the action plan; Formulation of respective project plans to be co-funded.
PP6	n/a
PP7	Simplify procedures and application forms for EU and national/local funding as much as possible. Use Connecting Europe Facility initiatives, such as WiFi4EU for improving Internet quality and establishing new public Internet access points for the Zadar county.
PP8	Reduce differences in broadband Internet access between regions and provide increased access to rural populations and SMEs.
PP9	Improve the absorption of EU funds, simplify the structure of management system of EU funds and improve coordination among public institutions.

PP10	Promote the ICT as Key Enabling Technology cross cutting key specialization sectors – introduce a new way of management process using full potential of internet–of–things and internet–of-everything.
PP12	Directly support SMEs in their ICT uptake, use good practices from the SKILLS+ GP collection through responsible institutions, i.e. business development organizations or chambers of commerce. Use appropriate programs to fund the ICT uptake and provide concrete project proposals.

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Source: Peer Review reports

The comparative analysis of the recommendations reflect several important recommendations. For example, PR experts suggest to **use Connecting Europe Facility initiatives, such as WiFi4EU for improving Internet quality and speed, especially in rural areas, and establish new public Internet access points** for the Zadar County. This recommendation could also be relevant for other partners. In case of Castilla and Leon (CyL) an important recommendation is that competition regulations should be changed since the legislation is in favour of the former public telecommunications companies, which keep high prices for the use of infrastructure even when the connections should be provided in areas without commercial interest. This slows down connectivity development in the rural areas of CyL. In case of Malopolska, it has been recommended to **improve the digitalisation of rural SMEs through targeted actions, including feasibilty study, identification of digitalisation focus for different industries**, i.e. grouping of digitalisation potential and priorities, and approving some of those funds for the action plan.

Other recommendations are related **to supporting local initiatives; use of ERDF funding for building adequate infrastructure; educational and training activities for users** (WM); **simplification and speeding up administrative procedures and application forms for EU and national/local funding** (Latvia)**.**

Partner	Table 2.13 Key findings: Section 7: Awareness Raising and Motivation
PP1	The attitude towards digitalisation should be considered: some people/companies seem to stress the negative consequences of digitalisation more than the opportunities (e.g. automation and unemployment). We also found that companies need a lot of information and awareness raising when it comes to new laws and regulations concerning digitalisation.
PP2	According to the SKILLS+ partner report, the greatest challenges for SMEs digitalisation in Kainuu are related to understanding the advantages provided by digitalisation. The lack of skills, costs of technologies, as well as demand for digital services in the region, need to be easily applicable and cost efficient to be used by society and businesses.

PP3	A good example of awareness raising is the e-Skills week successfully carried out for years in Latvia. Also, social media which iswell accepted by Latvians, should be further exploited. Moreover, during the meetings with the MoEPRD and Riga's and Zemgale's Regions, they used less innovative dissemination tools instead of using individual approach, when talking with rural SMEs (i.e. promoting that ICT university students share their knowledge in an informal way), which may be more efficient. This is based on the fact that rural SMEs very often aren't using social media and the way to make them aware of the benefits of using ICT is in a very simple, reliable and slow way.
PP4	The Region of WM has been hardly affected by the crisis, resulting in the high level of unemployment, especially among young people, which makes an impact on population, i.e. the motivation and activity. Increasing motivation and reducing the brain drain requires the application of measures on regional/national level. In addition, there is a lack of awareness in SMEs of benefits from research, digitalisation and innovation. There is also a lack of communication between the traditional business and the digital business.
PP5	n/a
PP6	n/a
PP7	Quite often SMEs are lacking information about opportunities brought by digitalisation and SMEs development opportunities. Also, there are not enough training and mentoring opportunities for the SMEs capacity building and business development. As a result, companies aren't willing to invest in ICT, because they don't see direct benefits.
PP8	The ICT sector in Bulgaria generates approximately 10% of the total national GDP and 78.000 people work in the ICT business, which represented 2.7% of the total workforce. Bulgaria is one of the leading countries with a high number of top multinational ICT corporations such as HP, SAP, Johnson Controls, CISCO in Eastern Europe. This is contrasted by a lack of awareness of SMEs related to research, digitalisation and innovation, as well as a lack of communication between traditional business and digital business. Moreover, raising awareness and motivation is important and necessary for all actors at all levels (local, regional, national as well as (enterprises, administration, policy) to foster digitisation and build a competitive economy.
PP9	Raising awareness about benefits of digitalisation is one of the key factors for promoting digitalisation.

PP10	There is a lack of knowledge of advantages provided by the ICT application. The Digital Entrepreneurship program should help to increase awareness of digitalisation perspectives. The lack of broadband, costs of Internet and low digital literacy are also considered to be a problem.
PP12	n/a

Legend: PP1=Saxony-Anhalt; PP2=Kainuu; PP3=Latvia; PP4=Western Macedonia; PP5=Malopolska; PP6=Sør Trøndelag; PP7=Zadar; PP8=Bulgaria; PP9=Castilla and Leon; PP10=West Pannon; PP12=Ostrava.
Source: Peer Review reports

A common trait, relative to the most important findings on the topic "Awareness Raising and Motivation", is that of a **lack of awareness** (potential and business opportunities offered by digitalisation**) and information, and motivation**. In some cases, companies have **negative perceptions about digitalisation** (Saxony-Anhalt), which should be overcome. In other occasions, the **lack of communication between ICT and traditional businesses, especially rural SMEs,** was mentioned as an obstacle for digitalisation (WM, Bulgaria). Important activities for awareness raising training and mentoring was also mentioned (Zadar) and the brain drain was noted as a related obstacle (WM).

Partner	Table 2.14 Recommendations Section 7: Awareness Raising and Motivation
PP1	More information for companies about new laws and regulations concerning digitalisation, and related consequences should be provided.
PP2	Information and awareness for understanding of the advantages provided by digitalisation must be increased.
PP3	Use more social media as an effective dissemination tool; Apply individual approach when tackling rural SMEs; Establish digital leadership.
PP4	Analyse the causes of brain drain; Improve communication between traditional business and digital business.
PP5	Organise motivation programme for SME digitalisation, including creation of rural e-contact points. Have ICT tutors in the villages to explain to rural SMEs the benefits of ICT, give examples, encourage them to get into ROP partnerships, submit joint proposals, and eventually implement ICT improvement actions.
PP6	n/a
PP7	Consider creating more user-friendly e-services and organize awareness raising campaigns to inform society about digital possibilities in simple and easily understandable ways.

PP8	Strengthen communication and cooperation between all actors to improve awareness raising; Inform companies about possibilities and opportunities of digitisation and integration of IT applications; Show best practices (own best practices and from SKILLS+ partner regions) and success stories to the SME's; Analyse the causes of brain drain.
PP9	Organise training for improving digital skills of aged population; Organise awareness raising campaigns explaining benefits of digitalisation to the SMEs in rural areas; Promote existing grant opportunities, where SMEs could apply for financing in order to improve digitalisation.
PP10	One of the solutions could be the integrated enterprise management (ERP) system and the customer relationship management (CRM) system. Traditional paper-based processes should be moved to the digital space and make products and services available via the broadband Internet on company websites, as well as online shops and social media sites. New community marketing solutions could help to find new markets and customers, as well as efficient solutions for communication with customers.
PP12	Communication of the possibilities provided by the Policy Instrument.

Legend: PP1=Saxony-Anhalt; PP2=Kainuu; PP3=Latvia; PP4=Western Macedonia; PP5=Malopolska; PP6=Sør Trøndelag; PP7=Zadar; PP8=Bulgaria; PP9=Castilla and Leon; PP10=West Pannon; PP12=Ostrava.
Source: Peer Review reports.

The recommended actions focus on two themes: 1) **Awareness raising, information and motivation by providing more information and organizing awareness raising campaigns on digitalisation aspects to companies in simple and easily understandable way**. This was also suggested **to use a more individualized approach when targeting rural SMEs and exploit social networks more effectively** (Latvia), as well as **to adapt new integrated management approaches and move away from paper-based processes** (WP). This is important in **illustrating the opportunities and benefits of digitisation and integration of IT applications, as well as presenting best practices and success stories**. 2) **Improve communication and cooperation among all involved actors and, especially, traditional business and the digital business**.

Additional recommendations are related to **analysing causes of the brain drain** (WM, Bulgaria); **creating friendlier e-services** (Zadar) and **simple digital solutions for SMEs** (Latvia); **organise trainings for improving digital skills of aged population**; and **promote existing grant opportunities for SMEs** (Castilla and Leon).

Partner	Table 2.15 Key findings Section 8: Internationalization
PP1	n/a
PP2	Cross border projects with Nordic countries and Russia play an important role in international cooperation. Touristic potential of Kainuu region is not fully exploited and information about

	regional attractions cannot be found easily in electronic version. Threats in African and Asian countries associated with religious tensions enable Finland to expand its offer for visitors from abroad.
PP3	n/a
PP4	The Region of Western Macedonia in the current programming period (2014-2020) has developed important working relationships with its neighbouring border regions and with other regions in the European area that are identified as areas of common interest. Companies of a very small size work in traditional sectors, like family farms mainly produce for local customers. They export of energy and lignite, and traditional companies produce furs, saffron. Tourism activities are under development and are supported by the promotion by IT Applications and web sites. Internationalization activities and exports support for regional SME´s are of a low intensity, which is also caused by a low use of ICT. Participation in international and cross-border projects play an important role.
PP5	Around 70% of all major IT companies in Poland are outsourcing centres belonging to international companies, such as Microsoft, Google and Oracle, which makes Poland a top nearshore IT outsourcing destination for Europe. Małopolska is a region with high concentration of companies of the ICT industry and has the second highest employment rate in the ICT sector in Poland. Twenty-three big international ICT companies, such as IBM, Motorola, Nokia., are located in the capital city of Małopolska – Krakow.
PP6	n/a
PP7	SMEs are looking for support to get contacts abroad to go international. Also, they need support for export development and finding niche markets. At the same time, there are SMEs with great success stories, such as Agrivi, which is working on a global scale.
PP8	Bulgaria participates in scientific organizations in European programs and Global innovation networks, as well as technological platforms. In this context SMEs and Bulgarian researchers conducted successful joint projects. Also, the presence of IT multinational corporation and the fact that the ICT sector is generating about 10% of the total national GDP are important factors behind the development helping ICT business easily access top-notch technologies at affordable prices.
PP9	According to the Joint study there is a close connection between the CYL ERDF (European Regional Development Fund) Operational Programme (OP) with the RIS3, which contains the Digital Agenda for CYL – an instrument to increase competitiveness of SME by making ICT a tool to boost innovation, social and territorial cohesion, rural development, growth and employment.

PP10	n/a
PP12	n/s

Legend: PP1=Saxony-Anhalt; PP2=Kainuu; PP3=Latvia; PP4=Western Macedonia; PP5=Malopolska; PP6=Sør Trøndelag; PP7=Zadar; PP8=Bulgaria; PP9=Castilla and Leon; PP10=West Pannon; PP12=Ostrava.
Source: Peer Review reports.

Digitalisation and ICT uptake are important elements for improving international competitiveness of SMEs and entering international markets**. The comparative analysis on the theme of Internationalization highlights that it hasn't been actively supported in all partners' territories. For example, Western Macedonia has developed important working relationships with the neighbouring border regions and with other regions in the European area that are identified as areas of common interest. Tourism activities are considered as important for regional economies and they can also better develop when supported by ICT and digital solutions (Zadar, WM, Kainuu)**

In general, there are **instruments, such as grant schemes, and structures helping SMEs to achieve international competitiveness and target foreign markets**. However, SMEs often **lack knowledge and skills for external markets, language barriers** prevent business and professionals from extending activities beyond the national market. Positioning in the international market is also complex and costly if SMEs are acting alone. Partner regions **are having difficulty finding entry points, identifying business partners, finding niche markets, exporting development and searching funding opportunities** assigned for exports. At the same time, there are SMEs with great success stories, such as Agrivi, which is working on a global scale (Zadar).

Partner	Table 2.16 Recommendations Section 8: Internationalization
PP1	n/a
PP2	Define products from E-health prototype services out of the DiHyTe project and research possibilities for nationwide rollout and export. Develop advanced platform/app for visitors in Kainuu region. PR team recommend to use several modern ICT tools, which can be applied to advertise the region for foreign tourists and help visitors for easier sightseeing: interactive guide for visitors: website, PDF, mobile app; map of region attractions (connected with neighbourhood regions); route planner with clear links to public / private transport companies (buses, trains, taxi); platform with services offered for visitors with possibility for booking (use experience from Digital Service Tray project). Each tool should be prepared in several languages, that is Finnish, English, Russian, Swedish and German at least, e.g. digital tool "Cultourist" (best practice from Norway) can be used as good pattern to develop platform for Kainuu region.
PP3	n/a
PP4	Marketing and promotion improvement; Clusters to promote the regional products; Follow up the established new relationships with neighbouring and other regions.

PP5	Upscale the digital potential of Polish retail SMEs or SMEs with consumer departments sales sections to be able to sell across borders: from the exports registry, identify businesses that sell massively cross-border; identify those businesses that are selling retail in Poland and have commercial retail capacity; Contact the businesses and ask if they are they willing to sell more outside the Polish borders, initially to Germany and gradually to the rest of the EU. Those businesses that answer "yes" will be in the project and take part in the action plan; Make a comprehensive plan (= funding criteria/ Investment Priority 3c of the Malopolska ROP) for selling on line, invoicing and bank arrangements cross border; ensure reliable language accessibilty (Polish, German, English); Parallel to the above, make a cross border Interreg project to develop first of all the safe demand for the products of the Polish retail (can be Interreg A Central Europe maybe). The result will be a joint space of potential online buyers retail and whole sale, both sides of the border; Map the potential of research capacities, how many of them are oriented in the software development (any equivalent of IT4 Innovation in Ostrava – Research centre finance by the EU2007-13 ERDF) and what they can offer to private sector, present both partners advantages of the cooperation.
PP6	n/a
PP7	Improve cooperation among companies of Zadar and Croatia, as well as among Croatian and foreign companies; Promote creation of cooperation platforms, networks and clusters to facilitate communication and cooperation between companies.
PP8	Foster participation in European programmes; Speak about the effects and findings of the successful projects; Analyse the Bulgarian's image and promote the change of this image.
PP9	Make available grant schemes fostering the international competitiveness of the SMEs.
PP10	n/a
PP12	n/a

Legend: PP1=Saxony-Anhalt; PP2=Kainuu; PP3=Latvia; PP4=Western Macedonia; PP5=Malopolska; PP6=Sør Trøndelag; PP7=Zadar; PP8=Bulgaria; PP9=Castilla and Leon; PP10=West Pannon; PP12=Ostrava.
Source: Peer Review reports

The comparative analysis of the Recommendations regarding the theme "Internationalisation" highlights the importance of three focus areas.

The first concerns **the need to develop integrated services for the out-going internationalization, including export services, marketing and promotion, as well as applying modern digital solutions for attracting foreign tourists. Integrated services include training; consulting; participation to trade events and fairs.**

The second focus concerns **the support of cross-border networking connections and internal networking**: relationships with neighbouring and other regions (WM); improvement of cooperation among companies, including the establishment of networks and clusters (WM, Zadar).

The third focus relates to incoming internationalization by: **supporting key-expertise and exports** (WM); building a **territorial brand and improving image** (Bulgaria). A specific recommendation was made for Kainuu: to define products from E-health prototype services out of the DiHyTe project and research possibilities for nationwide rollout and export, while it is recommended to Malopolska to upscale the digital potential of Polish retail SMEs or SMEs with consumer departments sales sections to be able to sell cross border. In addition, participation in European and cross-border programmes (Bulgaria, Malopolska) have been recommended.

It has to be noted that the aspect of internationalization hasn't been particularly addressed by PRs and Baseline Studies of several regions, including Saxony-Anhalt, Latvia, Sør Trøndelag, West Pannon and Ostrava.

Section 3: SME digitalisation policies impact indicators

The objective of this section is to connect the dimensions and / or latent factors related to the different areas of the strategic development of digitalisation identified by the Comparative Analysis carried out in Section 2 with a series of qualitative-quantitative indicators related to the impact of policies for the SME's digitalisation.

In addition, it considers Self-defined performance policies and output indicators identified in the SKILLS+ Application form.

Table 3.1 Self-defined Performance Policies and Target Indicators		
No	**Description**	**Target number**
Policy 1	Increase of the percentage of SME located in rural areas to use the provided funding opportunities to invest in integration of ICT in their business routines (baseline year: 2015)	10
Policy 2	Number of supported SMEs actually growing for three years following the intervention (actual growth of staff of at least 10 per cent per year over a period for 3 years)	10
Policy 3	Number of new products/services developed and introduced by SME in rural areas after having received ERDF funding	50

Policy 4	Additional number of SME using ICT in day-to-day company operations after having received support through the addressed policy instrument	40
Policy 5	Increase number of SME using ICT in their day-to-day business activities	50
Policy 6	Increase of SME digitalisation initiatives thanks to better performance measurement indicators (accelleration compared to 2015 baseline year; by 2020)	5
Policy 7	Increase of funding received by SME from Zadar County (by 2020 in comparison to 2015 as baseline year)	20
Policy 8	Increase the share of funding allocated to small enterprises from rural areas (by 2020; percentage increase compared to 2015 as baseline year)	10
Policy 9	Funding allocated to SME to fund innovative ICT solutions raised (in percentage of total funding dealt out by 2020)	10
Policy 10	Actual growth of small rural areas' companies following financial support by the EDIOP (growth percentage; measured in turn-over increase in the year following the intervention)	10
Policy 11	Growth of the number of small companies from rural areas to participate in the national programme (measured annually in percentage in the years following the SKILLS+ Action Plan's implementation)	10

Source: SKILLS+ Application form

Table 3.2 Output indicators Target	
Description	**Target number**
No. of policy learning events organised	164
No. of good practices identified	60
No. of people with increased professional capacity due to their participation in interregional cooperation activities.	150
No. of action plans developed	12
No. of appearances in media (e.g. press)	60
No. of new visitors to project website since last reporting period	50

The matching between the themes and their main characteristics is foreseen as a helpful tool for 1) a complete collation phase of potentially interesting indicators for monitoring the SKILLS+ policies and 2) an exercise for dissemination of the results of the project.

Table 3.3 that combines the characteristics\latent dimensions with a set of possible indicators, both qualitative and quantitative. However, it may not exactly match the indicators included in the Application form.

Table 3.3 Common actions for implementation and proposed indicators		
	COMMON ACTIONS FOR IMPLEMENTATION	**MAIN ACTIONS AND RELATED INDICATORS**
Raising Awareness and Motivation (related to Policy 2, 5 and 11)	**Increase the awareness and information on benefits and opportunities of digitalisation**	Awareness raising and information campaigns to show opportunities and benefits of digitisation and integration of IT applications; workshops and presentations of current best practices and success stories; proposals for more individualized awareness raising approaches; increased use of social networks; adaption of new integrated management approaches on the company level; reduction of paper-based processes; New or improved exchange and cooperation networks/platforms among all involved actors and, especially, traditional and digital businesses.
	Related actions/indicators	Analysis of the causes of the brain drain and proposals to stop it; proposals for friendlier e-services and simple digital solutions for SMEs; trainings for improving digital skills of aged population; sessions, workshops and dissemination of information events to promote existing grant opportunities for SMEs.
Regional Strategy (related policies – all)	**Ensure the improved policy framework and coordination among institutions, as well as flexibility of public administration, including necessary adjustments for the OP and legislation**.	Proposals/programmes for the improved policy framework and better coordination among institutions policy instruments and measures, proposals for the amendments of policy documents, legislative acts; proposals for adjustments for the OP and legislation; new support measures for SMEs development and start-ups; new measures for the improvement of business environment.

	Related actions/indicators	Improved broadband infrastructure, connectivity and internet access (According to DESI or local indicators); implementation of the 5G network
Education, Skills and Capacity Building (rekated to Policy 1, 2, 6 and 11)	**Deal with the brain drain and demographic issues, as well as shortages in education systems that lead to lack of skilled workforce**	Organize information campaigns, targeting younger people, on the opportunities in the ICT-sector in the region; incentives for education institutions to attract talents and increase quality of ICT education; regional scholarships and incentives for those studying IT-related subjects; programmes/proposals for introducing business and ICT education in schools; cooperation platforms and networks among companies, schools and educational institutions; new or modernized and distance learning educational programmes, new business clusters; proposals for the creation of a recognizable certification systems for completed courses/trainings; good practices taken over other regions; analysis of the causes of brain drain and recommendations to stop it.
	Related actions/indicators	Awareness raising events, initiatives for the promotion of e-commerce and life-long learning, initiatives for the security improvement for ICT tools, initiatives for the promotion of cooperation among entrepreneurs, and others.
Administrative and Technical Issues (related policies – all)	**Improve accessibility of the Internet and EU funding, improve related regulations and legislation**	Applications to use Connecting Europe Facility initiatives, such as WiFi4EU for improving Internet quality and speed, especially in rural areas; new public Internet access points, proposals/amendments to policy and legislative documents; initiatives/projects for promoting the Internet access and connections in the areas without commercial interest; targeted actions to improve the digitalisation of rural SMEs, i.e.

		feasibility studies, identification of digitalisation focuses for different industries, i.e. grouping of digitalisation potential and priorities; and approving some of those funds for the action plan; the supported local initiatives; Extended broadband infrastructure and increased speed of the Internet; educational and training activities for users; simplified and speeding up administrative procedures and application forms for EU and national/local funding.
Favourable Business Environment (related policies – all)	**Support SMEs digitalisation and ICT uptake by providing more favourable conditions and additional support**	New more specialized intermediary or support structures tackling digitalisation of SMEs, including clusters and networks involving rural SMEs; new business support organizations; new one stop shops and help desks, new Client Service Centres; increased geographical diffusion of ICT culture and infrastructure; new digitalisation related tasks and responsibilities for already existing institutions; additional non-monetary support measures; new strategies for the use of ICT in companies; additional consulting provided; Amount of increased public co-financing for digitalisation; new solutions, i.e. non-commercial procurement solution; new specific measures for SME to uptake ICT in their day-to-day activities.
	Related actions/indicators	Improved broadband infrastructure in rural areas; Digitalisation of application processes; Improved coordination and cooperation among responsible institutions and businesses.
Access to Finance (related policies – all)	**Improve access to finance and facilitate the use of the OP and ERDF funding, attract private resources**	Organize campaigns and meetings to reduce a negative perception of EU regulations and documentation; solutions/ recommendations to reduce the funding gap between EU programming periods; proposed alternative approaches, i.e. shortening funding cycle; proposals and recommendations to make application procedures easier for SMEs; amount of additionally attracted

		public and private funding; new financial instruments, such as accelerators, introduced; specific support options for rural SMEs digitalisation, including the use of innovation vouchers; simplified application procedures, especially for SMEs
		Improved connectivity and infrastructure; additional supporting technologies and innovation activities for enterprises; Development of environment and research, as well as innovation infrastructure for business needs; new financial support measures for the innovation of enterprises; information events or publications about financial perspectives.
Partnerships and Networking (Related to Policy 3, 4, 5, 6, 9)	**Increase and improve cooperation among businesses and other triple helix model actors**	New cooperation projects / networks / platforms to intensify cooperation between businesses, R&D and education institutions, and to promoting exchange and collaboration among businesses, including cooperation with and within clusters.
	Related actions/indicators	New joint business education programmes; events presenting best practices and success stories to SMEs; new or improved coordination of digitalisation initiatives, strategies and institutions; additional SMEs involved in existing cooperation structures.
Internationalization (Related to policy 3 and 9)	**Develop new integrated solutions and services for businesses and export promotion**	Newly develop integrated services for the out-going internationalization, including export services, marketing and promotion; new modern digital solutions for attracting foreign tourists.
	Increase, regional, national, cross-border and international cooperation	New cross-border and international networking connections; new regional, national and international networks, cooperation structures and agreements.

	Promote export	supported key-expertise and exports; projects to promote regional branding and image; newly developed export products and services; participation in new European and cross-border programmes.

Source: Peer review reports

Section 4: General Conclusions

The joint analysis of the SKILLS+ Peer Reviews' documents had to consider different approaches taken by PR teams, as well as to go back to Baseline Studies to look for additional information. Despite considerable diversities in approaches, regional situations, as well as findings and recommendations, it was possible to summarise main findings and recommendations under the eight proposed methodological sub-sections for evaluating the SMEs digitalisation in Table 4.1.

Previous analysis quite clearly indicates that a fundamental issue for the partnership across almost all sectors of interest is the improved broadband infrastructure, connectivity and internet access followed by the improved cooperation between businesses and research & education institutions in order to promote innovation, prevent labour shortage, improve the ICT education and skills, as well as to fight with the brain drain. The next most important factor is the efficiency of regional institutions and processes, as well as coordination among national and regional/local level organisations, initiatives and measures.

Table 4.1 Key Findings and Recommendations

Action	Key Findings	Reccomendations
Awareness Raising and Motivation	1.The **lack of awareness** (potential and business opportunities offered by digitalisation) and information, and motivation. In some cases - negative perception about digitalisation. 2.The **lack of communication** between ICT and traditional businesses, especially rural SMEs.	1. Promote **awareness raising**, information and motivation by disseminating more information and organizing awareness raising campaigns on digitalisation aspects to companies in simple and easily understandable way. Use more individualized approach when targeting rural SMEs and exploit social networks more effectively. Show opportunities and benefits of digitisation and integration of IT applications, as well as present best practices and success stories. 2. Adapt new integrated management approaches and move away from paper-based processes.

		3. Improve **communication and cooperation** among all involved actors and, especially, traditional business and the digital business. 4. Analyse causes of **brain drain** and develop proposals to prevent it. 5. Create friendlier e-services and simple digital solutions for SME. 6. Organise trainings for improving digital skills of aged population. 7. Promote existing grant opportunities for SMEs.
Regional Strategy	1.Regional level **digitalisation strategies** are especially important for digital development of SMEs; however, they are included in other policy documents or do not exist at all in cases of several partners. The importance of having a digitalisation strategy on a company level has been emphasised 2**. Coordination** between national, federal and regional/local level strategies and policy documents is lacking, which is particularly important to ensure that there isn't **overlapping and duplication** of activities to ensure the most efficient results of digitalisation. 3.**Regional innovation systems**, as well as presence of such factors as the IT4IN super computer in the region have been particularly stressed.	1. Ensure the improved **policy framework** and **coordination** among institutions, as well as flexibility of public administration, including necessary adjustments for the OP and legislation. 2**.** Strengthen the c**oordination and integration** among different regional policy instruments and measures; policy documents and instruments should be better suited for digitalisation needs of SMEs. 3. Provide **support measures** for SMEs development, start-ups, as well as improvement of business environment and removing drawbacks from regulations and legislation. 4. Ensure the development and improvement of the **ICT infrastructure,** which is a precondition for SMEs development, especially, in rural areas.
Education, Skills and Capacity Building	1.Shortage of **ICT skills and labour**, demographic issues (population aging and depopulation), **mismatch** between skills and demand, where the educational offer influences the supply of skills.	1. Inform younger people about the opportunities in the ICT-sector in the region. 2. Focus on high-quality education to attract **talents**.

	2. Lack or **ICT specialists**, as well as insufficient **training** and shortages in school curriculum. 3. Shortage of **competitive job offers** for ICT specialists on regional or rural levels. 4. **Brain drain** that leads to the lack of skilled workforce and **demographic issues**. 5. Lack or **insufficient cooperation** between R&D, education and business organizations	3. Provide r**egional scholarships and incentives** for those studying IT-related subjects. 4. Introduce and promote business and **ICT education** in schools. 5. Create **cooperation** among companies, schools and educational institutions. 6. Modernize **educational programmes**, make them more flexible and increase access to distance learning, promote lifelong learning. 7. Create recognizable **certification** for completed courses/trainings. 8. Take over **good practices** from other regions. 9. Analyse the causes of **brain drain** and develop solutions to overcome this problem. 11. Promote **awareness** raising. 12. Promote **e-commerce**. 13. Ensure **security improvement** for ICT tools. 14. Promote cooperation among entrepreneurs to ensure **mutual learning**.
Administrative and Technical Issues	1. **Complicated and too slow administrative procedures** accessing support and financing, especially EU funds' resources for digitalisation, too much paperwork. 2. Development of **broadband infrastructure, connectivity and access** to internet are fundamental factors. 3. Lack of **skills** of both, entrepreneurs and also administrative bodies. 5. Delays in **absorption of EU funds**. 6. Significant **differences in accessibility** across the regions and, especially, in rural areas.	1. Simplify and speed up **administrative procedures** and application forms for EU and national/local funding. 2. Use **Connecting Europe Facility initiatives**, such as WiFi4EU for improving Internet quality and speed, especially in rural areas, establish new public Internet **access points.** 3. Improve the **digitalisation of rural SMEs** through targeted actions, including feasibilty study, identification of digitalisation focus for different industries, i.e. grouping of digitalisation potential and priorities; and approving some of those funds for the Action plan.

	7. SMEs are lacking **simple digital solutions**, which aren't developed by ICT companies as they don't see a lot of demand on the local market.	4. Promote **educational and training activities** for users. 5. Use the **ERDF funding** for building adequate infrastructure. 6. Support **local initiatives**.
Favourable Business Environment	1.Strong variability of the **presence of SME support organizations/ instruments**, including support for SMEs digitalisation. 2. As the most important **support instruments,** clusters, networks, incubators, co-working platforms, technological and science parks, region-wide administrative structures, grants and loans for competence development, special measures and initiatives, intermediary organizations, Chambers of Commerce, business associations, innovation agencies, special economic zones, accelerators, super computing infrastructure have been mentioned. 3. Presence of **multinational corporations** and businesses is another indicator emphasising a positive impact of favourable business environment. 4. Setting the **digital innovation and development** as a priority for the regional policy, as well as a presence of technological environment, greatly stimulates digitalisation of businesses. 5. Shortages in **broadband infrastructure** and non-digitalized application processes delay digitalisation processes. 6. Lack of **information** about support instruments and funding possibilities. 7. Lack of **internationalization**, **brain drain**, lack of **training**, **high costs** of	1. Create additional more **specialized intermediary or support structures** tackling digitalisation of SMEs, such as clusters and networks involving smaller rural companies, new business support organizations; one-stop shops, help desks, Client Service Centres. 2. Achieve the **increased geographical diffusion** of ICT culture and infrastructure. 3. Exploit better capacities and advantages of already existing institutions. 4. Introduce specific measures for SME to uptake ICT in their day-to-day activities. 5. Explore and implement additional **non-monetary support measures**. 6. Ensure consulting and public co-financing should. 7. Adopt non-commercial procurement solution. 8. Improve the **broadband infrastructure** in rural areas; 9. Ensure digitalisation of application processes. 10. Ensure better coordination and cooperation among responsible institutions and businesses.

	digitalisation, **insufficient innovation** potential of SMEs are obstacles preventing SMEs from the ICT uptake. 8. **Intermediary organizations** don't participate in SME digitalisation processes actively enough.	
Access to Finance	1. Presence of **significant financial resources for digitalisation** in partner regions, especially EU and other public, but also private funding. 2. Problems in **absorption of funding** related to lack of information, complicated administrative procedures, low capacity of rural SMEs, barriers and non-digitalisation of applications 3. Problems for businesses **accessing funding for digitalisation**. 4. Difficulties for SMEs to apply for calls providing larger financial resources and unclear possibilities for access to finance when the EU provided funding will end.	1. Reduce **negative perceptions** on EU regulations and documentation. 2. Find solutions how to reduce the **funding gap** between EU programming periods. 3. Search for alternative approaches, i.e. shortening funding cycle to make **application procedures** easier for SMEs. 4. Attract and use **private financial resources.** 5. Continue developing **new financial instruments**, such as accelerators, to target innovative, hi-tech and fast growth companies. 6. Envisage **specific support options** for rural SMEs digitalisation, including the use of innovation vouchers. 7. Improve **connectivity and infrastructure**. 8. Support **technologies and innovation activities** of enterprises. 9. Develop **environment and research, as well as innovation infrastructure** for business needs. 10. Provide **financial support** for innovation in enterprises. 11. Disseminate **information** about financial perspectives.
Partnerships and Networking	1. **Insufficient collaboration** between businesses, R&D and education organizations, as well as cooperation among companies.	1. Improve and/or **intensify cooperation** between businesses, R&D and education institutions, as well as promoting exchange and collaboration among

	2. **Lack of coordination** for implementation of digitalisation initiatives. 3. **Lack of regional level cooperation** networks, platforms and/or clusters. 4. **Complicate procedures** of EU funds absorption. 5. **Fragmentation** of responsibilities between responsible institutions 6. **Lack of networks** among regional organizations and complicated system of coordination. 7. **Cooperation between stakeholders** in order to change policy and improve situation has been considered as essential.	businesses, including cooperation with and within clusters. 2. Improve **coordination** of digitalisation initiatives and strategies. 3. Present **best practices** and success stories to SMEs. 4. Establish new structures or reorganize the existing ones. 6. Link rural SMEs to one common platform that can effectively facilitate exports and/or increase operational capacity.
Internationalization	1. Digitalisation and ICT uptake are important elements for improving **international competitiveness** of SMEs and entering international markets. 2. **Tourism activities** are considered as important for regional economies and they can also better develop when supported by ICT and digital solutions. 3. SMEs often lack **knowledge and skills** for external markets, language barriers prevent business and professionals from extending activities beyond the national market. 4 Difficulties finding entry points, identifying business partners, finding niche markets, export development and searching funding opportunities assigned for export.	1. Develop **integrated services** (training; consulting; participation to trade events and fairs) for the out-going internationalization, including export services, marketing and promotion, as well as applying modern digital solutions for attracting foreign tourists. 2. Support cross-border and internal **networking**, relationships with neighbouring and other regions. 3. Improve **cooperation** among companies, including the establishment of networks and clusters. 4. Support **key-expertise and exports**. 5. Promote territorial branding and image. 6. Participate in European and cross-border programmes.

Source: Peer review reports

The analysis shows that potential of SMEs digitalisation is not yet fully exploited. While some European regions have been very good at tapping into this potential, as a way to promote socio-economic development - including through the use of EU Structural Funds, however, it appears that many others have not been making

most of this potential. The joint report highlights that, to make this potential explicit, considering the different characteristics, as well as the infrastructure development levels of the digitalisation, a variety of existing but disconnected resources must be put in place and a series of constraints and barriers should be removed.

The lack of comparability in data analysis used to support SMEs digitalisation, makes it difficult to truly assess barriers and solutions, which are common for all partner regions. Therefore, each partner should assess its regional situation and select the most appropriate measures to be included in the Action plan and implemented during the 2nd stage of the SKILLS+ project.

Sources of information

University of Latvia, SKILLS+ Joint Study "Promoting knowledge capacity in ICT among SME to engage in growth and innovation", Riga, March 2018.

Peer Review Reports, Checklists and other related documents (unpublished materials of the SKILLS+ project), 2017-2018.

PART II

Table 1.A Checklist Comparative Table

	PP1	PP2	PP3	PP4	PP5	PP6	PP7	PP8	PP9	PP10	PP12
1. Regional strategy											
1.1 There is clear strategy or measures for digitalization, supported by specific objectives and indicators: - national level - regional level.	YES	YES	YES	YES, but ROP has some shortages	YES	YES	YES	YES, national level	YES	YES	NO, neither level has a clear strategy
1.2 Region has clearly defined its targets for improving SMEs competitiveness, including the uptake and integration of modern ICT tools.	YES	YES	YES	YES, but not detailed regional ICT strategy per sector	YES	YES	YES, national level	YES, national level	YES	N/A	YES, but strongest focus on the ICT is needed
1.3 Progress is regularly assessed against its objectives and measures outcomes.	YES	YES	YES	N/A	YES	YES	YES, through OP	N/A	YES	YES	N/A
1.4 Different sources of funding are employed to support the implementation of the strategy/measures.	YES	YES	YES	YES	NO	YES	Yes, mainly CF	YES	YES	NO	N/A

	PP1	PP2	PP3	PP4	PP5	PP6	PP7	PP8	PP9	PP10	PP12
1.5 There is SMEs digitalisation strategy/measures, supported by specific objectives and indicators (measures to sustain / boost ICT take-up of companies).	YES	YES	YES	YES, RIS3 for WM	N/A	YES	YES, measures implemented and foreseen	YES, but mainly on the national level	YES	YES, national level	NO, only in relation to OP
1.6 The different regional strategies/measures are clearly coordinated, also with national and other levels.	YES, with room for improvement	N/A	YES	NO	YES	YES	NO, weak cooperation	NO	YES	NO. no regional strategy	YES
1.7 The regional strategy/measures have taken into account sustainable development objectives.	N/A	YES	YES	NO	YES	YES	YES	NO	YES	NO, no regional strategy	YES
2. **Education and HR**											
	PP1	**PP2**	**PP3**	**PP4**	**PP5**	**PP6**	**PP7**	**PP8**	**PP9**	**PP10**	**PP12**
2.1 There is an appropriate connection between universities and businesses: companies find the manpower they need and students find the job they want.	Yes, but there is also a skilled worker shortage	NO, some shortages were identified	NO	NO	YES	YES, but it could be improved	NO	NO	YES	YES, but it could be improved	YES

2.2 The region provides instruments to support education in the ICT sector.	In the beginning phase	YES	YES	YES, but additional intervention needed	YES	YES, but additional intervention needed	YES, on the higher education level	YES, but mainly on the national level	NO	NO, such possibilities are provided by the OP only	YES
2.3 Demand and offer fit on the regional market (regional workers find jobs and regional companies find the necessary human resources, all this in the region)	No, there is a mismatch	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES
2.4 Measures have been set up to limit the migration of necessary workforce out of the regional territory.	Yes, but should be improved	YES	YES	NO	NO	NO	NO, only some measures are in place	NO	NO	NO	NO
2.5 There is an equal opportunities policy regarding employment in the region.	N/A	YES	N/A	NO	N/A	N/A	N/A	N/A	YES	YES	YES
3. Innovative environment for ICT development											

	PP1	PP2	PP3	PP4	PP5	PP6	PP7	PP8	PP9	PP10	PP12
3.1 The region has a clearly identified innovation anchor(s).	YES	YES	YES	NO	YES	YES	N/A	YES	YES	YES	YES
3.2 Clusters, accelerators, science parks and other innovation hubs are present and act as support instruments.	YES	YES, but some lacks were identified	YES	NO	YES, but not explicit cluster policy	YES	YES	YES	YES, but partially	YES	YES
3.3 Intermediary organisations (such as Chambers of Commerce, Business Associations, innovation agencies …) play an active role in fostering ICT and digitalisation in the territory.	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
3.4 Knowledge Providers (universities, research and innovation centres) cooperate and network efficiently with companies.	YES	NO	NO, lack of cooperation tradition	NO	NO	YES, but should be improved	NO, case by case cooperation	YES	YES	YES, but should be improved	YES
3.5 Existence of a diversified business environment (big/small/old/new companies).	No	YES	YES	NO	YES	YES	YES	N/A	YES	YES	YES

3.6 Jobs in the ICT sector are available throughout the region's territory (as opposed to only in certain areas).	no	YES	NO	NO	NO	YES	YES	N/A	YES	N/A	YES
3.7 The business environment is active to support ICT and digitalisation.	Yes, but should be improved	YES	NO	NO	YES, but improvements are needed	YES	YEA	N/A	YES	YES	YES
3.8 Existence of private financial actors (venture capitalist, business angels, seed funds, etc.).	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO	N/A	N/A
4. Partnership											
	PP1	**PP2**	**PP3**	**PP4**	**PP5**	**PP6**	**PP7**	**PP8**	**PP9**	**PP10**	**PP12**
4.1 The regional authority has an active role in fostering partnerships between ICT stakeholders (companies, clusters, innovation and research centres, universities).	YES	YES	NO	YES	YES	YES	YES	YES	YES	YES	YES
4.2 The regional authority is itself involved in this partnership and works closely with existing stakeholders.	YES	YES	YES	N/A	YES	YES	YES	YES	N/A	NO, the Regional	N/A

									YES	Innovation System is missing, it should be improved	YES
4.3 If applicable, the SKILLS+ partner has an active role/is involved in the existing partnerships between innovation stakeholders.	YES	YES	NO	YES	YES	YES	YES	YES	YES	YES	YES
4.4 Involvement of other stakeholders, such as Chamber of Commerce, trade unions, employment agencies in different projects, cooperation networks, etc.	YES	YES	YES	N/A	YES	YES	NO, case by case cooperation	YES	YES	YES	YES
4.5 Existence of established links and regular interactions with final beneficiaries (workers, students, unemployed, etc.)	N/A	YES	YES	YES, but gaps exist	YES	YES, but gaps exist	N/A	YES, but gaps exist	YES	YES	YES

| 4.6 Involvement of the region and/or ICT stakeholders in local/interregional, national, international cooperation projects/agreements. | N/A | YES | YES | YES, through projects | YES | YES | NO, case by case cooperation | N/A | YES | YES | YES |

Legend: PP1=Saxony-Anhalt; PP2=Kainuu; PP3=Latvia; PP4=Western Macedonia; PP5=Malopolska; PP6=Sør Trøndelag; PP7=Zadar; PP8=Bulgaria; PP9=Castilla and Leon; PP10=West Pannon; PP12=Ostrava.[2]

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[2] PP11 University of Latvia, which is the Advisory partner, is not included in the comparative analysis.

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