



Assessment of Smart Specialisation Strategies implementation and its impact

Pomorskie, Poland

Webinar 1: Impact of Smart Specialisation Strategies implementation on governance in

Online working meeting
DATE 9/11/202

Impact of S3 implementation on policy governance

New or Improved institutional arrangements and impact	Factors / policy instruments triggering changes	Indicators
<ul style="list-style-type: none"> ▪ Establishment of four Pomorskie Smart Specialisation's (PSS) Councils as part of the EDP proces (conducting systematic cooperation for the development of PSSs and increasing effectiveness of Agreements' implementation). ▪ Appointment of PSSs Leaders for each specialisation (animating cooperation within the specialisation as well as substantive and organizational support). ▪ Many improvements in cluster policy including their involvement in regional development (e.g modern services). 	<ul style="list-style-type: none"> ▪ Regulations of the ISP Councils, regular meetings and communication, involvement in monitoring the the regional economy. ▪ Smart Progress project (Pomorskie ROP 1.1.1) - Animation to increase the activity of entities from PSSs areas and increase administrative capacity. ▪ Higher knowledge of enterprises in many strategic areas that has resulted in their decisions. 	<ul style="list-style-type: none"> ▪ Meetings of the PSSs Councils with the participation of representatives of the Marshal's Office, PSSs Leaders and external guests. ▪ Leaders' reports on the activity in 6 months. ▪ Innovation barometer for each PSS (including diagnosis, trends). ▪ Trainings, workshops, analyzes tailored to the needs of PSSs. ▪ Number of new members of the PSS Agreements encouraged by the ISP Leader.

Impact of S3 implementation on policy governance

New or Enhanced Stakeholders and impact	Factors/ policy instruments triggering changes	Indicators
<ul style="list-style-type: none"> ▪ Establishment of working groups by the PSSs Councils (recommended and initiated by the PSI Councils) - energy islands, internationalization, health spa treatment. The groups are working in the most strategic areas from the regional development perspective. ▪ Creation of dedicated interest groups (consortia) within PSSs areas (bottom-up approach of signatories to the PSS Agreements) - offshore, autonomous vehicles. Those groups are connected with the new global trends. 	<ul style="list-style-type: none"> ▪ Financial instruments dedicated to PSSs (returnable, e.g. 1.1.1 Pomorskie ROP and non-returnable, e.g. Loan for innovation). ▪ PSSs Agreements. ▪ Exchange of experiences/ B2B meetings. 	<ul style="list-style-type: none"> ▪ Number of groups created. ▪ Number of joint ventures / projects.

Impact of S3 implementation on policy governance

Improved administrative capacity and impact	Factors/ policy instruments triggering changes	Indicators
<ul style="list-style-type: none"> ▪ Division dedicated to Pomorskie Smart Specialisations (PSSs) in Department of Economic Development. ▪ Appointment of four PSSs leaders on behalf of Department of Economic Development. ▪ Division dedicated to monitoring. ▪ Knowledge acquisition from external sources (OECD studies - emerging industries, Deloitte - consultancy in management of PSSs and the entrepreneurial discovery process). 	<ul style="list-style-type: none"> ▪ Marshal's Office funds (employee salaries, training funds). ▪ Pomorskie Regional Operational Programme funds - Smart Progress project. ▪ Pomorskie Regional Operational Programme funds - Technical Assistance (Deloitte). ▪ External measures - central level. 	<ul style="list-style-type: none"> ▪ Number of people involved in PSSs on behalf of the Marshal's Office. ▪ Number of trainings, workshops. ▪ Number of external services

What are the links you identify between the changes and factors listed above and the ultimate goal of S3, which is territorial economic transformation?

1. Which affect economic development and growth.
2. Better and more efficient use of resources (with the use of e.g. the circular economy, AI, the green transformation).
3. More innovative economy.
4. Attracting talented employees.

Conclusion, Key findings:

- Role of clusters as a fundament for Pomorskie Smart Specialisations
- Role of cross-sectoral projects as a creative way to new innovative projects
- Thematic groups helps in selecting concrete products and services (→ commercialisation)
- Role of internationalisation – higher experiences and knowledge of companies



Assessment of Smart Specialisation Strategies implementation and its impact

Webinar 2/ Towards economic transformation: Impact of adopting Smart Specialisation Strategies on innovation ecosystems

Online working meeting

Towards economic transformation: Impact of adopting Smart Specialisation Strategies on innovation ecosystems

Impact of introducing/ improving innovation ecosystems (industrial transition, environmentally driven innovation, knowledge networks, outward looking dimension, clusters, etc.)

Types of changes	Key impact
<p>Enterprises concentrated around PSSs areas are eager to implement R&D projects financed from EU regional funds.</p> <p>The highest activity among the areas of specialisation is shown by PSS 2 - 26 signed contracts, while the remaining specialisations implement a similar number of projects (PSS 1 - 14, PSS 3 - 13, PSS 4 - 15), obtaining a total of nearly PLN 168.6 mln (EUR 37 mln) in funding.</p> <p>Clusters' involvement in creating an innovation ecosystem and policy.</p>	<p>Increased innovation in the region. Increased implementation of R&D projects.</p> <p>Number of services provided by clusters.</p>

Towards economic transformation: Impact of adopting Smart Specialisation Strategies on innovation ecosystems

Factors triggering changes

- Better access to support instruments (grants and repayable instrument).
- Clusters' involvement in activities related to PPSs and the entrepreneurial discovery process.
- Increasing companies' awareness of the need to undertake innovative activities.
- Higher digitalisation of society and enterprises.
- Potential for the development of ICT technologies, such as: 5G, algorithms (artificial intelligence), autonomous systems (including autonomous vehicles), Internet of Things, cloud computing, augmented and virtual reality, automation and robotics, cybersecurity.
- Increased interest in the use of artificial intelligence technology.
- A well-developed (but still poorly coordinated) infrastructure to support entrepreneurship, incl. startup development.
- Availability of specialist advisory services for entrepreneurs, as well as specialized scientific institutions, incubators or clusters providing a specific type of services.

Towards economic transformation: Impact of adopting Smart Specialisation Strategies on innovation ecosystems

Indicators

- Internet access - 96.1% (2018), 94.8% (2013)

In our dreams:

- number of services,
- amount of public support,
- amount of private capital

in the field of information technologies, such as: 5G connectivity, learning algorithms (artificial intelligence), autonomous systems (including autonomous vehicles), Internet of Things, cloud computing, augmented and virtual reality , automation and robotics, cybersecurity - broken down into smart specializations



Assessment of Smart Specialisation Strategies implementation and its impact

Webinar 3/ : Impact of adopting Smart Specialisation Strategies in terms of growth and jobs

Online working meeting

Impact of adopting Smart Specialisation Strategies in terms of growth and jobs

Impact of S3 in macro-economic terms	Factors / policy instruments triggering changes	Indicators
<ul style="list-style-type: none"> ▪ Change of the situation on the labor market (increase in demand for labor, decrease in unemployment, increase in the number of employees, competency deficits in selected industries and occupations with simultaneous aging of labor resources and a significant influx of migrant workers); ▪ Increase in innovation (3rd position in terms of expenditure on R&D in relation to GDP. In recent years, these expenditure increased from 0.98% in 2013 to 1.08% in 2017. The ratio of expenditure on R&D is also high in enterprise sector, which increased in the analyzed period from 0.51% in 2013 to 0.76% in 2017, placing the region in 4th place in the country.). The number of people working in R&D is also gradually increasing, which in 2018 amounted to nearly 8.5 thousand people (less than 6 thousand in 2013), placing the region in the 5th place in the country.) 	<ul style="list-style-type: none"> ▪ Attracting talents and integrating immigrants (e.g. initiatives 'Three steps to integration', 'Live more. Pomerania', 'Pomorskie supports employers', 'Study in Pomorskie'); ▪ Attracting investments to the region and creating new workplaces ('Invest in Pomerania'); ▪ Development and adjustment of competences adequately to the needs of the economy (e.g. 'Work for Pomeranians' - regional program of the Voivodeship Labor Office, 'Good workplaces in Pomerania'). 	<ul style="list-style-type: none"> ▪ Employment rate (20 - 64 years) [%] ▪ Working [thou. people] ▪ Adult lifelong learning index (25 - 64 years) [%] ▪ Working in R&D activities (internal staff) [persons] including fields: <ul style="list-style-type: none"> - engineering and technical sciences - medical science and health sciences ▪ Working in R&D activities (internal staff), including fields: <ul style="list-style-type: none"> - the enterprise sector - the higher education sector ▪ Percentage of people aged 30-34 with higher education (above the EU average) ▪ Expenditure on innovation beyond R&D (EU average) ▪ Employment in medium / high tech manufacturing and knowledge-based services as a percentage of the total workforce (EU average)

Impact of adopting Smart Specialisation Strategies in terms of growth and jobs

Sectoral Impact of S3	Factors / policy instruments triggering changes	Indicators
<p>An important distinguishing feature of the Pomorskie Voivodeship is the sustained high share of innovative enterprises in the total number of enterprises (25.6% in 2018, 2nd place in the country, just behind the Mazowieckie Voivodeship. In 2013 it was 13th place in the country).</p> <ul style="list-style-type: none"> ▪ PSS 1 - Maritime - is developing towards digitalization of port logistics and digital modernization of maritime specialisation. Developing thematic industry groups regarding staff education for the maritime industry and issues related to the use of new technologies, including space and satellite technologies, alternative fuels in the offshore and port and logistics areas. ▪ PSS 2 - ICT - is based on the significant activity of participants following the development of technology in the field of industry megatrends, especially related to artificial intelligence or autonomous systems. 	<ul style="list-style-type: none"> ▪ The Regional Operational Programme of Pomorskie Region (subsidy and repayable instruments). ▪ The PSSs Agreements. 	<ul style="list-style-type: none"> ▪ Investment outlays on the maritime economy in the Pomorskie Voivodeship in 2018 (PLN 0.958 billion) account for 45% of outlays in the country (1st place before Zachodniopomorskie and Warmińsko-Mazurskie), but they are decreasing compared to 2015 (PLN 1.89 billion) , which is significant for the development of PSS 1. There is an upward trend in the gross value of fixed assets in the maritime economy (an increase from PLN 13.99 billion in 2015 to PLN 16.70 billion in 2018). ▪ Increase in employment in ICT by 44% (in 2014, employed 11.7 thousand people, and in 2018 - 16.8 thousand), which gave the 5th place in terms of the number of people employed in the ICT industry among voivodeships in Poland (2018).

Impact of adopting Smart Specialisation Strategies in terms of growth and jobs

Sectoral Impact of S3	Factors / policy instruments triggering changes	Indicators
<p>PSS 3 - Energy - mainly focus on the successful transformation from fossil energy to renewable energy. The share of renewable energy in Pomorskie in the total electricity production is systematically growing. The activity of the specialisation is developing towards: ecological and energy-efficient construction, energy storage or the use of new fuels, incl. hydrogen (Pomeranian Hydrogen Valley).</p> <p>PSS 4 - Health - focused on the preparation of technology for the needs of medical and care units and patients. Local startups and enterprises cooperate with universities and medical staff, participating in joint projects and networking initiatives, which favors the implementation of the latest technologies in regional hospitals, e.g. using artificial intelligence. Research topics related to virology and health spa treatment are being developed.</p>	<ul style="list-style-type: none"> ▪ The Regional Operational Programme of Pomorskie Region (subsidy and repayable instruments). ▪ The PSSs Agreements. 	<ul style="list-style-type: none"> ▪ The outlays and effects of financing renewable energy projects in the voivodeship amount to PLN 1.46 billion and PLN 124 million / year, respectively, and production is 597.7 GWh / year ▪ In 2018, the region was 6th in the country in terms of the number of enterprises operating in the field of biotechnology and 5th in terms of personnel in this area in enterprises. Internal expenditure on R&D in the field of medical and health sciences increased by nearly 74% in 6 years (2013 - PLN 181 million, 2018 - PLN 315.4 million), which gives Pomorskie 2nd position in Poland (PLN 2.8 billion - 2018) after the voivodeship Mazowieckie. It proves a greater propensity to implement innovations in the area of health specialisation.

Impact of adopting Smart Specialisation Strategies in terms of growth and jobs

S3 impact in terms of jobs and growth	Factors / policy instruments triggering changes	Indicators
<ul style="list-style-type: none">▪ A strong conglomerate of universities in the region (two research universities as one of three such regions in Poland, on a par with academic centers in Warsaw and Krakow), research units, large enterprises, local clusters and startup development infrastructure.	<ul style="list-style-type: none">▪ Consistent regional cooperation▪ Pomorskie ROP	<ul style="list-style-type: none">▪ Number of universities in the region▪ Number of innovative companies in the region

Other

- A call of proposal is underway to conduct a study 'Analysis of the dynamics of development of Pomorskie Smart Specialisations (PSSs) and the competency needs of business entities belonging to the areas of PSSs operating in the Pomorskie Voivodeship".
- The subject of the study is to prepare and conduct a comprehensive analysis of the potential, scale and capabilities of industries in PSSs areas, in particular in terms of their innovation, internationalization and competency needs. The research to be performed under the contract is quantitative and qualitative. It will cover economic entities operating in the Pomorskie Voivodeship.
- The main purpose of the analysis is to assess the dynamics of development, innovation, competitiveness and the impact of PSSs on the development of the Pomorskie economy and to diagnose the demand for competences related to the functioning of PSSs.
- The study will be carried out as part of the Smart Progress project (Pomorskie ROP).