



# How EU funds should support integration of digital technologies by SMEs and public administration

## The case of Podlasie

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# eGov services for citizens and businesses

- What's indispensable:
  - proper information and process architecture
  - ...followed by appropriate **law-making**
- General rules:
  - cut the **red tape**, do not „digitize” superfluous procedures
  - do not implement services „aping” old paper-based procedures
- deploy the eGov services which are:
  - really needed
  - easy to use
- be very careful when imposing eGov services on SMEs (especially on micros)



# Areas of support

## ➤ Infrastructure

### ➤ Connectivity – never enough

- reach
- quality
- competitiveness

### ➤ Technologies

- Fibreoptics wherever possible
- Mobile access (5G)
  - for filling the gaps
  - for handy use when/where needed

## ➤ Competencies

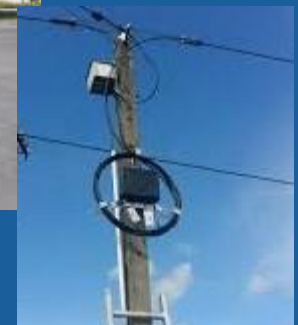
### ➤ education

### ➤ follow the best practices

- Internet and mobile banking



<http://nowa.scinawa.pl>



# The case of Podlasie



- One of the least developed regions
- Out of the 16 Polish voivodeships Podlaskie Voivodeship (Podlasie) is:
  - No 14. by population (1,181.5 thousand), No 6. by territory (20,187 km<sup>2</sup>), No 16. by population density (59 person/km<sup>2</sup> – Poland: 123, Portugal: 111, Norte: 168, Galicia: 91)
  - industrial production 61% of Poland's average, the strong sector: milk production and dairy products (No. 2 in Poland: 20.6% of the country's production of cow milk)
  - valuable natural resources (Natura 2000 sites – No 2 in Poland, famous Białowieża Forest)
- Main obstacles of growth:
  - Unfavourable demographic trends: aging population, emigration of younger generations
  - Low purchasing power of consumers, institutions and enterprises
  - Low position of local businesses in the value-chain
  - The longest distance from Poland's main EU trade partners, low road and railway transport accessibility indicators
  - SMEs lack resources (financial, human) to advance beyond the position of sub-contractor/supplier of low-processed goods



# Can ICT become a RIS3 of Podlasie?

## ➤ Limited IT potential & capacities

➤ Biggest local companies - purchasers and advanced users of ERP systems, production control and automation, supply chain management, CAD/CAM etc.- use systems used supplied by the country's leading IT vendors

➤ Only a few local IT companies are involved in the deployment of advanced IT solutions for leading non-IT business entities in Podlasie

## ➤ General problem of ICT trainings

<i>ICT trainings – share of companies</i>	<i>Podlasie</i>	<i>Average of Poland</i>	<i>Area of Warsaw</i>
for ICT specialists	<b>4.2%</b>	<b>6.4%</b>	<b>12.5%</b>
for other employees	<b>8.3%</b>	<b>11.5%</b>	<b>18.9%</b>

Statistics Poland 2019

# Limited human resources

➤ Three state universities with IT departments:

➤ Białystok University of Technology 

➤ University of Białystok 

➤ Łomża State University of Applied Sciences 

The share of IT specialists in employment



**Białostocki Park Naukowo-Technologiczny**

➤ 60+ companies (25: IT, 3: robotics, 4 3D printing, 1 fintech)

➤ InfoTech cluster

➤ Poland-South Park in Suwałki

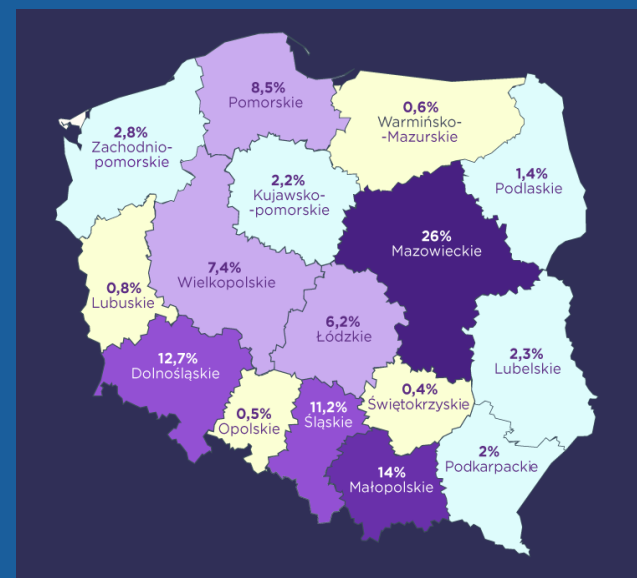


➤ 40 companies (mainly micros)

➤ Industrial Park Łomża



➤ 40 micros, virtual offices for 50 companies



<https://bulldogjob.pl/it-report/2020#profile>

# Infrastructure and IT companies

## ➤ Broadband access

Fixed broadband (2019)	Podlasie	Average of Poland
Households	<b>82,9%</b>	<b>83,3%</b>
Businesses		
Broadband	<b>84,5%</b>	<b>85,7%</b>
(NGA) 30+ Mbps	<b>47,8%</b>	<b>46,1%</b>

Statistics Poland 2019

- In 9 out of 10 main towns of Podlasie the users can choose a NGA offer of at least 3 ISPs
- All four MNOs are providing 5G at available LTE spectrum (*DSS – Dynamic Spectrum Sharing*)

## ➤ IT companies

Area/Class of entity	number of IT companies
NUTS3 Białystok	
Total	<b>1,492</b>
of which „one-man companies”	<b>1,239</b>
NUTS3 Łomża	
Total	<b>98</b>
of which „one-man companies”	<b>82</b>
NUTS3 Suwałki	
Total	<b>21</b>
of which „one-man companies”	<b>16</b>

Statistics Poland 2019

# Realistic approach to use of public funds

- ICT should not to be a RIS3 priority itself
- Main **directions of attack**:
  - deployment of ICT and robotics in areas of region's biggest potential:
    - pharmacy and life sciences
    - agri-food
    - machinery for agriculture, food-processing and forestry
    - furniture making
    - green economy
    - eco-tourism
    - sport boats production
- Support of SMEs in the use of IT
  - exceeding plain invoicing and inventory, office applications and e-mail
- Support for raising digital competencies of all:
  - especially the teachers of primary and secondary schools





# Support for digital transformation

- ICT technology transfer from academia to businesses
  - especially in the areas of local strengths indicated in RIS3:
    - biotechnologies, life sciences, food processing, green economy...
- Awareness of IT-based solutions should not be limited to computer systems
  - the use of the embedded IT built into every kind of equipment, from milking machines and the handheld rangefinders used in restoring homes, to cars and medical devices
  - competencies for using embedded IT solutions should be incorporated in the curricula of secondary technical schools and institutions active in vocational education and training
- Cybersecurity - raise the awareness of all stakeholders
  - citizens, entrepreneurs, public administration

