

APPENDIX 4 TO THE REGULATIONS FOR ENROLMENT AND ACCELERATION PROGRAMME "S5 - 5G TECHNOLOGY ACCELERATOR"

LIST OF REGIONAL SMART SPECIALIZATIONS IN THE ŁÓDZKIE VOIVODESHIP

The project submitted in the Application must **be aligned with at least one of the following** Regional Smart Specializations in the Łódzkie Voivodeship indicated in the list below. **Please select the appropriate specialisation the lowest possible level.**

Regional Smart Specialization no 3 - Medicine, Pharmacy, Cosmetics

XXI. Innovative solutions in the scope of IT tools used in healthcare systems, pharmaceutical and cosmetics industries

2. Solutions, technologies, products, tools, applications, algorithms for the development of new methods of acquisition, analysis, archiving and safe exchange of information on the patient's health, both between the patient and a medical professional, as well as groups of medical professionals, who are located in geographically distant places;

XXII. Innovative solutions in the scope of optimizing manufacturing processes in the pharmaceutical and cosmetic industries and in the production of medical devices

1. Design, optimization, automation, robotization of pharmaceutical and cosmetic product manufacturing processes;

4. Technologies of process automation and robotization;

7. Innovative systems for controlling machines and devices, robots

XXIII. Solutions in the scope of process and organizational innovation for healthcare management, including the transfer of products and services to clinical practice

4. Solutions in the scope of linking product and process innovations in clinical practice, including ICT-based innovations in clinical decision making, therapy and patient health monitoring.

Regional Smart Specialization no 4: Energy (including Renewable Energy Sources)

XXVII. IT tools supporting decision management and support processes

8. Smart systems for supporting operator decisions;

10. Methods and algorithms of electricity demand management (Demand Side Response, Demand Side Management);

14. Integration of metering and reading systems for multiple utilities (electricity, water, gas, heat), including solutions for Smart Cities;

15. Application of data transmission techniques and technologies for the needs of power engineering;

20. Optimization of prosumer strategies using smart energy meters;

24. Systems supporting prosumer power industry;

XXVIII. Innovative technologies to increase the efficiency of conventional fuel acquisition and use

6. New technical solutions to improve the lifetime of machinery and power equipment;

XXIX. Innovative technologies to increase the efficiency of alternative energy source acquisition and use

14. Models, algorithms and software to improve the efficiency of wheeled excavators under service conditions in deposits of reduced thickness;

15. Models, algorithms and software to improve and model/predict the energy intensity of mining processes;

18. Real-time monitoring of fuel quality parameters;

XXXV. Technologies related to customer activity (prosumer energy industry)

1. Smart adaptive measurement and decision making systems for Smart Grids;

3. Control and protection systems for small autonomous power systems, solutions for local communities and enterprises;

Regional Smart Specialization no 6: Information Technology and Telecommunications

XLVIII. Innovative software for smart cities and buildings, energy and transport networks (based on sensor networks)

1. Smart software in infrastructures using sensor networks;

2. Innovative services for the application of sensor networks;

LI. Innovative use of information technology in telemedicine and personalized medicine

1. Use of information technology in Medicine, Telemedicine and Personalized Medicine;

3. Manufacture of IT equipment for medical purposes

LIII. Smart ICT systems for optimization of production, logistics and supply chain processes (e.g. Product Lifecycle Management and Supply Chain for smart factory management)

1. IT systems to optimize the management and support of the production, delivery and supply chain;

2. Innovative services supporting the implementation of architecture optimizing the activity of enterprises;

LIV. Smart Internet technologies, including semantic technologies and the Internet of Things

1. Semantic Internet and network technologies;

3. Innovative services related to the automation of machine management activities within the Internet of Things;

4. Production of devices using convergence technologies (e.g. voice-data).

LVI. Smart data management systems in networks, including cloud computing

1. Smart data management systems in networks;

2. Cloud computing services;

LVIII. Smart solutions for data and information security

1. Software for data and information security;

2. Data security services.