



PREDNOSTNA PODROČJA SPS

S FOKUSNIMI PODROČJI IN TEHNOLOGIJAMI

Delovno gradivo SVRK kot podlaga za razpravo na investicijski konferenci 15. in 16. junija 2015

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1. ZDRAVO BIVALNO IN DELOVNO OKOLJE (Healthy Living and Working Environment)

1.1 Pametna mesta in skupnosti (Smart Cities and Communities)

Fokusna področja in tehnologije	Focus Areas & Technologies
<p>➤ <u>Fokusna področja</u></p> <ul style="list-style-type: none">• Odprte sistemske rešitve - IT platforme kot ekosistemi za gostovanje sistemskih, mobilnih aplikacij• Pametno grajeno okolje• Infrastruktura za e-mobilnost <p>➤ <u>Tehnologije</u></p> <ul style="list-style-type: none">• Računalništvo v oblaku• Množični podatki,• Internet stvari• Internet prihodnosti• Kibernetsko fizični sistemi• Naprave za zajem podatkov zemeljskih opazovanj• HPC infrastruktura	<p>➤ <u>Focus Areas</u></p> <ul style="list-style-type: none">• Systems and IT platform solutions - IT ecosystem for hosting systemic (mobile) applications• Smart building environment• E-mobility infrastructure <p>➤ <u>Technologies</u></p> <ul style="list-style-type: none">• Cloud Computing –• Big (open) data,• Internet of things• Future internet• Cyber-physical systems,• Remote sensing and Earth observation technologies• High Performance Computing infrastructure

1.2 Pametne zgradbe in dom z lesom (Smart buildings and home, including wood chain)

Fokusna področja in tehnologije	Focus Areas & Technologies
<ul style="list-style-type: none">• Napredne bivalne enote• Sistemi upravljanja stavb s ciljem avtonomije in energetske učinkovitosti• Pametne domače naprave• Gradnja z naprednimi materiali in elementi, vključno z lesom in lesnimi kompoziti	<ul style="list-style-type: none">• Smart Housing Units• Building automation and management systems targeting self-sufficiency and energy efficiency• Smart Appliances• Construction with advanced materials and elements, including wood and wood composites

2. NARAVNI IN TRADICIONALNI VIRI ZA PRIHODNOST (Natural and traditional resources for the future)

2.1. Mreže za prehod v krožno gospodarstvo (Networks for the transition into circular economy)

Fokusna področja in tehnologije	Focus Areas & Technologies
<ul style="list-style-type: none">• Novi poslovni modeli za prehod v krožno gospodarstvo• Tehnologije za predelavo biomase ter razvoj novih bioloških materialov• Tehnologije za čiščenja onesnaženih voda, zraka in zemlje• Tehnologije za uporabo sekundarnih surovin in ponovno uporabo odpadkov• Trajnostni energetske viri in tehnologije za upravljanje z energijo	<ul style="list-style-type: none">• New business models supporting the shift towards circular economy• Technologies for sustainable biomass transformation and new bio-based materials• Waste water treatment technologies and air and soil pollution treatment technologies• Technologies for use of secondary and re-use of waste• Sustainable management of energy and energy resources

2.3. Trajnostna pridelava hrane (Sustainable food production)

Fokusna področja in tehnologije	Focus Areas & Technologies
<ul style="list-style-type: none">• Trajnostna pridelava in predelava prehranskih produktov v funkcionalna živila• Inovativne kratke verige .• Tehnologije za trajnostno rastlinsko in živinorejsko proizvodnjo.• Prilagajanje kmetijske proizvodnje podnebnim spremembam.	<ul style="list-style-type: none">• Sustainable production and treatment of nutrients for functional foods• Short innovative supply-chains• Technologies for sustainable agricultural production (livestock and plants)• · adaption of agricultural conditions to climat change

2.4. Trajnosti turizem (Sustainable tourism)

Butični, ekološki in zdraviliški, s poudarkom na razvoju celostnih storitev, ki vodijo k vrhunskemu doživetju ob upoštevanju naravnih in kulturnih danosti

(Boutique, ecological and health tourism, with emphasis on comprehensive services leading to top-quality experience, taking into account natural and cultural resources.)

3. (S)INDUSTRIJA 4.0

3.1 Pametne tovarne (Smart factories)

Fokusna področja in tehnologije	Focus Areas & Technologies
<p>➤ <u>Fokusna področja</u></p> <ul style="list-style-type: none">• Optimizacija proizvodnje: (distribuirani) sistemi vodenja in nadzora, zagotavljanje kvalitete, regulacija in procesiranje podatkov, intralogistika, digitalna avtomatizacija• Optimizacija in avtomatizacija proizvodnih procesov: pametna orodja, mehatronski sistemi, aktuatorji in pametni senzorji <p>➤ <u>Tehnologije</u></p> <ul style="list-style-type: none">• Robotika• Nanotehnologije z mikro in nanoelektroniko• Plazemske tehnologije• Fotonika	<p>➤ <u>Focus Areas</u></p> <ul style="list-style-type: none">• Production optimisation: (distributed) production management and control, quality assurance, regulation & data processing, intralogistics, digital automatisaton• Optimization and automation of production processes: smart tools, mehatronic systems, actuators and smart sensors <p>➤ <u>Technologies</u></p> <ul style="list-style-type: none">• Robotics• Nanotechnologies, including micro and nano electronics• Plasma technologies• Photonics

3.2 Medicina (Medicine)

Fokusna področja in tehnologije	Focus Areas & Technologies
<ul style="list-style-type: none">• Biofarmacevtika in zdravila naravnega izvora• Odporne bakterije• Translacijska medicina: terapijka• Zdravljenje raka – diagnostika in terapija,	<ul style="list-style-type: none">• Bio-pharmaceutical products , medicines of natural origin• -Resistant bacteria• Translational Medicine: Therapeutic systems• Cancer diagnosis and treatment

3.3 Mobilnost (Mobility)

Fokusna področja in tehnologije	Focus Areas & Technologies
<ul style="list-style-type: none">• Nišne komponente in sistemi za motorje z notranjim izgorevanjem• Sistemi za elektrifikacijo vozil• Sistemi in komponente za varnost in udobje (notranja in zunanja oprema)• Materiali za avtomobilsko industrijo	<ul style="list-style-type: none">• Niche_Components and systems for internal combustion engines• Components and systems for electrification of vehicles• Systems and components for security and comfort (interior and exterior)• Materials

3.4. razvoj Materialov kot končnih produktov (Materials as end products)

Fokusna področja in tehnologije	Focus Areas & Technologies
<ul style="list-style-type: none">• Trajnostne tehnologije v predelavi kovin in zlitin,• Multikomponentni pametni materiali	<ul style="list-style-type: none">• Sustainable production technologies in metallurgy• Multi-component Smart Materials