# Addressing the Czech mission-oriented approach to solving societal challenges through RIS3

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# Why Smart specialization?

- → A widely used concept of supporting research, development and innovation in EU countries
- → Goal: smart (intelligent) use and development of the potential of a given country or region towards creating a long-term competitive advantage based on knowledge and innovation
- → The essence of smart specialization:
  - Concentrate all available resources (material, human and financial) only on a few priority areas where the given state/region is able to achieve significant change
  - A continuous "entrepreneurial discovery process" focused on discovering **new business opportunities** and directing activities to increase competitiveness





Evidence-based policy: Analysis of country/regions strengths, potential of knowledge capacities, ability to respond to current trends etc.

### **Czech National RIS3 Strategy priorities**

#### **Horizontal priorities**

Response to generic / horizontal problems of the RD&I system in the CZ in key areas of change

Horizontal RIS3 strategic and specific objectives for key areas of change:

- Business RD&I
- Public R&D
- People and smart skills
- Digitalization

**Vertical thematical priorities** 

Domains of research and innovation specialisation

Combination of technological specialization in cross-cutting technologies such as KETs and absorption capacity for new knowledge and R&D in the application sectors results:

- Specific RD&I topics
- KETs applications
- Relevant topics from the area of social sciences

# 9 thematical domains



# Global societal challenges

**Pollution** 



Ageing



Wastes



Drought



**Attacks** 



- → They threaten the entire planet
- → They affect every region, city, municipality
- → They concern each of us

SUSTAINABLE GOALS































# How to solve global societal challenges?

# **Current practice**

- → Isolated measures have only a limited effect
- → Each researcher/innovator solves only his partial problem
- Groups of solvers do not know about each other





(Operational) programmes + National programmes

### **Targer state**

- → Interrelated measures with a comprehensive effect
- → Researchers/innovators connect and solve the problem together
- Groups of solvers create networks and exploit synergies



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Societal challenges

Specific topics focusing on responses to emerging societal challenges resolvable by RD&I



# Mission-oriented approach

- Offers comprehensive solution to a certain societal challenge
- → Based on cooperation, interdisciplinarity and the involvement of not only technical and technological innovations, but also societal innovations



- → The Czech Republic has decided to respond to two social challenges (corresponding with particular SDGs)
- → They reflect urgent challenges from the Czech Republic point of view
- → Their selection was supported by EDP
  - Primary analysis of national strategies and objectives approved by the Czech government
  - Discussion in expert teams (researchers, technology developers, innovators, academia, policy makers, opinion makers, funding providers ...)
  - Brainstorming, topic clustering, generalization...
  - Elaboration of mission concept, wording of mission objectives and R&I topics

#### **Topics R&I in key and emerging technologies** NIP I.\* KETs KETs **KETs KETs** KETS **KETs** NIP II. KETs KETs **KETs KETs** NIP III.\* KETs KETs **KETs KETs** KETS KETS. **KETs** NIP IV. **KETs** KETs NIP V. KETs **KETs** KETs **KETs** NIP VI.\* KETs KETs KETs. KETs **R&D Strategic Topics (ST) in application sectors** NIP I. \* ST ST NIP II. ST ST NIP III.\* ST .....ST NIP IV. ST ST ST NIP V. ST ST NIP VI.\* ST ST ST Humanities, arts and social sciences (HASS) topics HASS NIPI.\* HASS **HASS** HASS HASS . HASS NIP II. **HASS** HASS HASS. HASS NIP III. \* HASS **HASS** NIP IV. HASS **HASS** HASS **HASS** NIP V. HASS **HASS HASS** HASS NIP VI.\* **HASS** HASS HASS HASS

# MISSION CARD



- EXISTED / NEW TOPICS
- TIME
- TARGET / INDICATORS
- FUNDING





New

RD&I

topics

from

expert

work

shops

<sup>\*</sup>NIP consists of two specialization domains

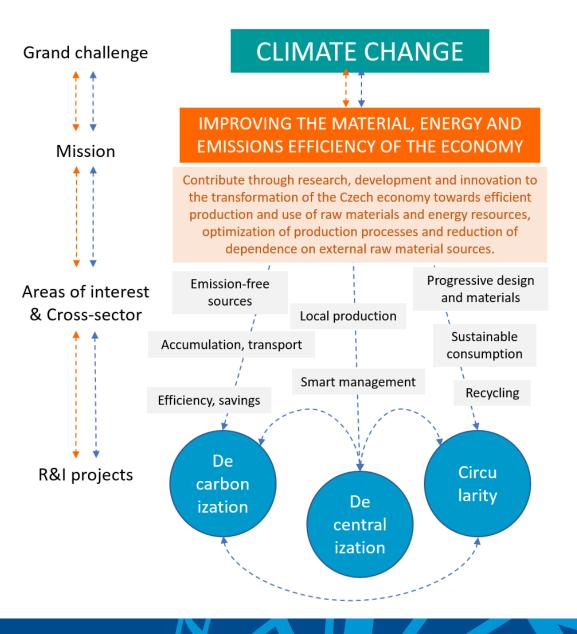
# National RIS3 mission "Efficiency..."







More about this RIS3 mission on the <u>portal</u> <u>www.ris3.cz</u>



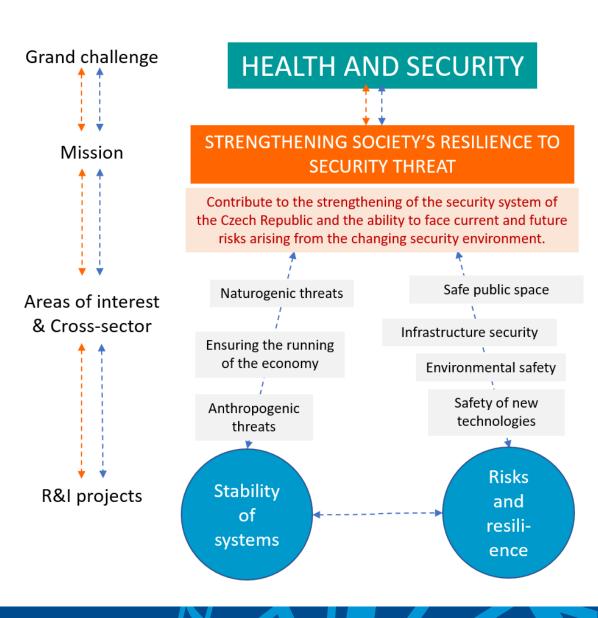
# National RIS3 mission "Resilience..."





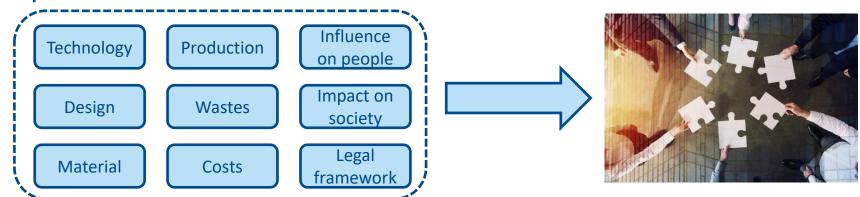


More about this RIS3 mission on the <u>portal www.ris3.cz</u>



# Can mission change the innovation policy?

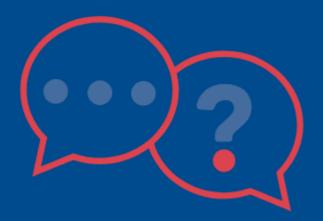
- → Missions bring a new perspective to research and innovation
- They overcome the isolation of individual research teams and innovation adoption
- → They also offer the opportunity to concentrate limited funds from various sources to address current needs
- → While the domains of specialization solve the transition in a specific thematic area, the mission addresses one specific problem that intersects across different areas.



# What's next?

- → We are now at the beginning, in the experimental stage
- → We have designed RIS3 missions and we are working on implementation, monitoring and evaluation setup
  - We are discussing with funding authorities to support mission as much as possible – we aim at maximizing the number of funding providers
  - Together with JRC we are designing the monitoring and evaluation of missions
- > Yet there are some questions that need to be clarify
  - What should be the governance of such a RIS3 mission?
  - ► How should regions be involved in RIS3 missions? How should cooperate with national level?





# Thank you for your attention



