

Ústecký kraj
#NOVÝ START

ICUK

**Presentation of CCAM projects in CZE/Usti Region
Cross-border collaboration funding possibilities for 2021-27**

Petr Achs

**Saxony-CZE Cooperation Workshop on Automated Driving
29. 04. 2021, online**

Petr Achs



- **PM / S3 project developer**
 - smart mobility, DIH
- **Regional Authority of Ústí Region**
- **Innovation Centre of Ústí Region**

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Content

- **Brief overview of CCAM related activities in CZE**
- **Projects in Ústí Region**
- **Crossborder collaboration funding possibilities**

Automated mobility in CZE

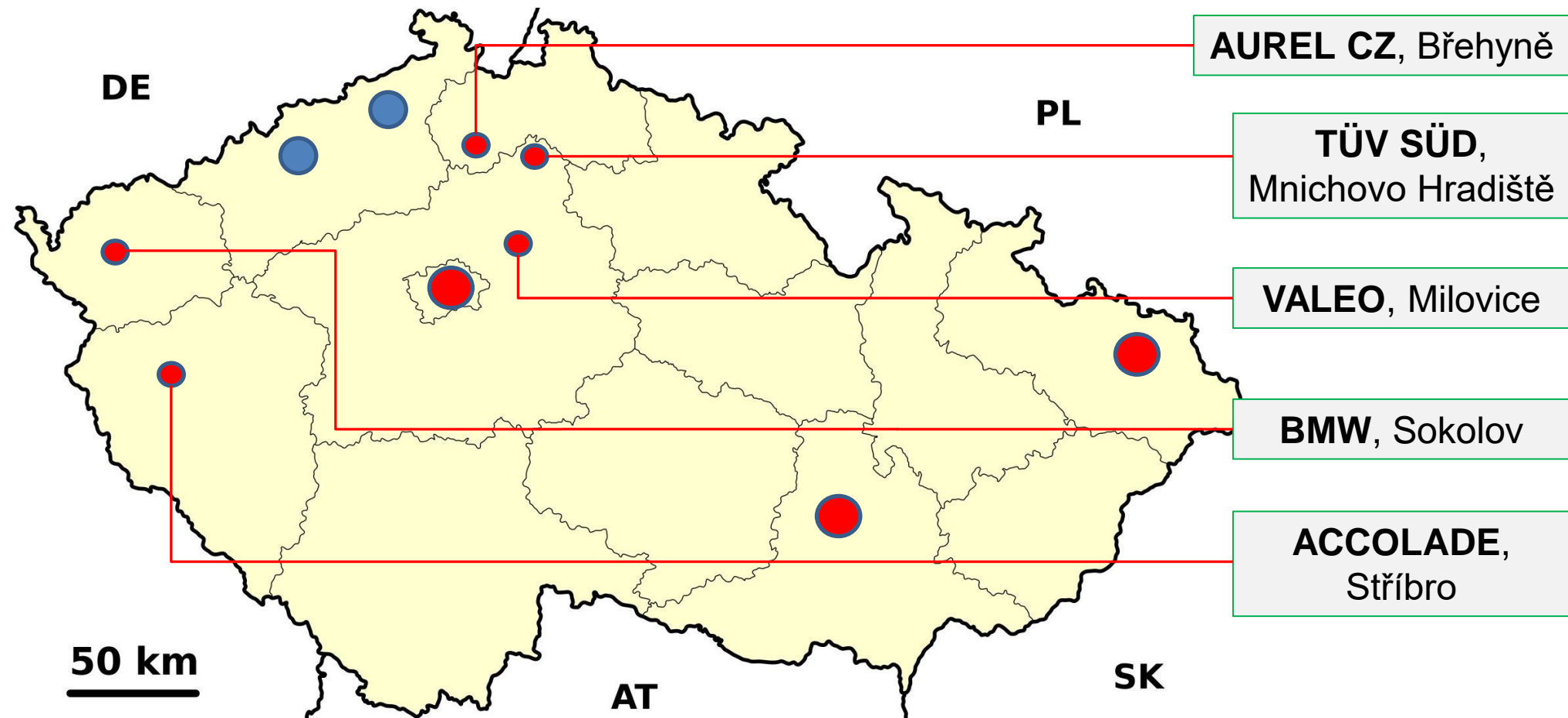
- **Strategy**

- Action plan for autonomous driving
- Strategic ITS Development Plan 2021-2027
- National polygon yes or no?

- **National programme „TRANSPORT 2020+“**

- research projects
- subsidy up to 50 mil. CZK (€1,9 mil.)/project
- 1st call – **141** proj., 2nd call – **227**, 3rd call - open

Polygons for ADAS/CCAV



Automated mobility in CZE

- **Projects**

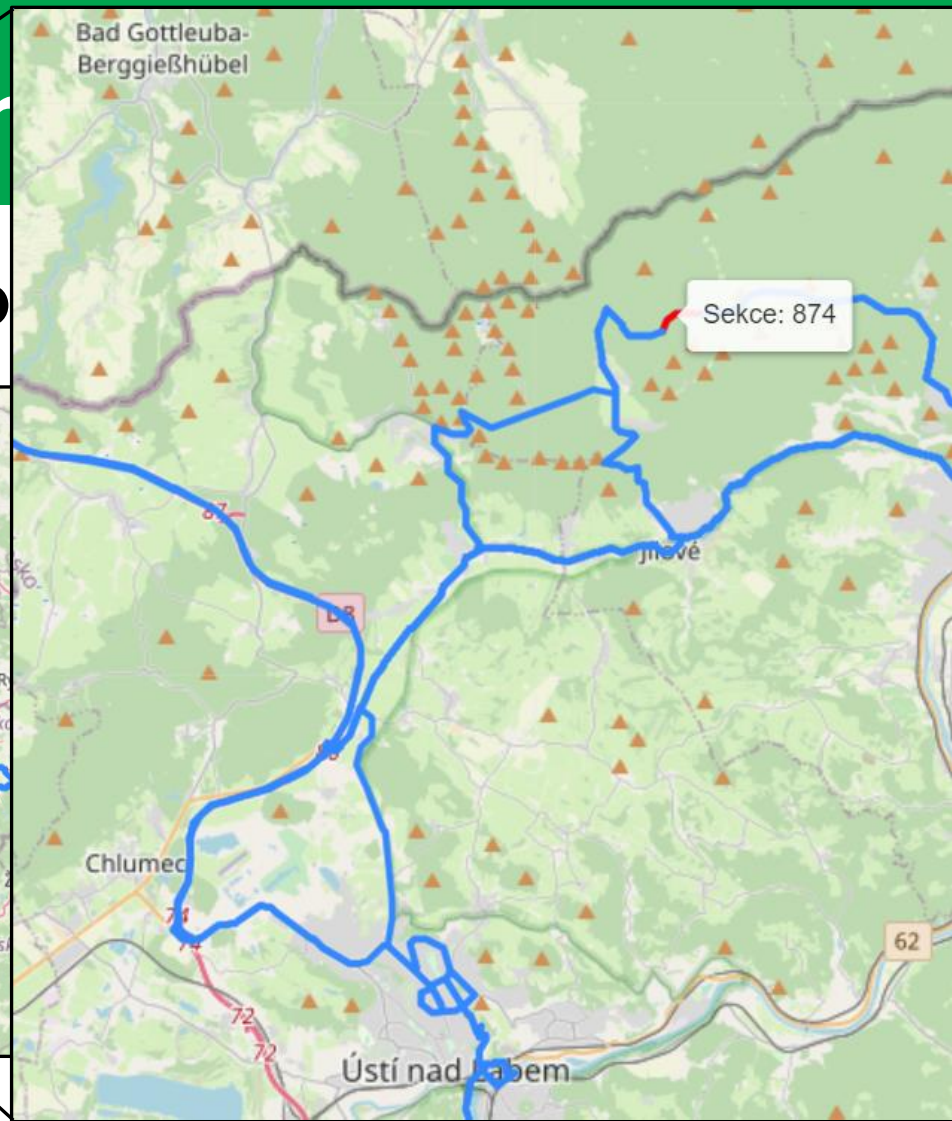
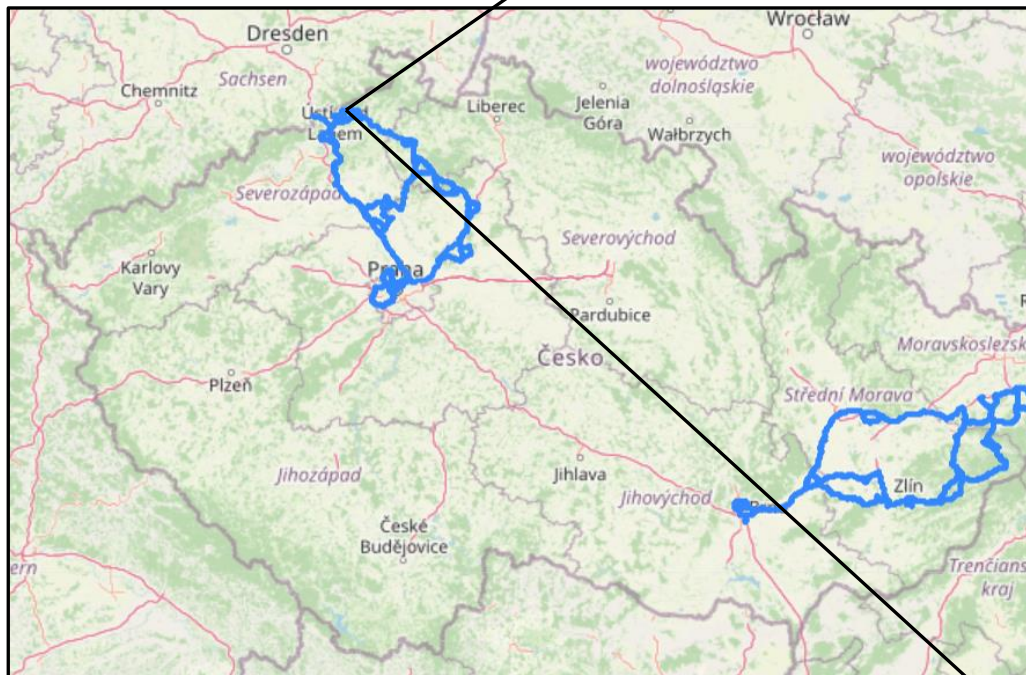
- Catalogue of testing areas
- [C-ROADS](#), [PAVAMTIO](#)

- **Participation on H2020 projects (examples)**

- [DRIVES](#)
- [MAVEN](#)
- [SHOW](#)

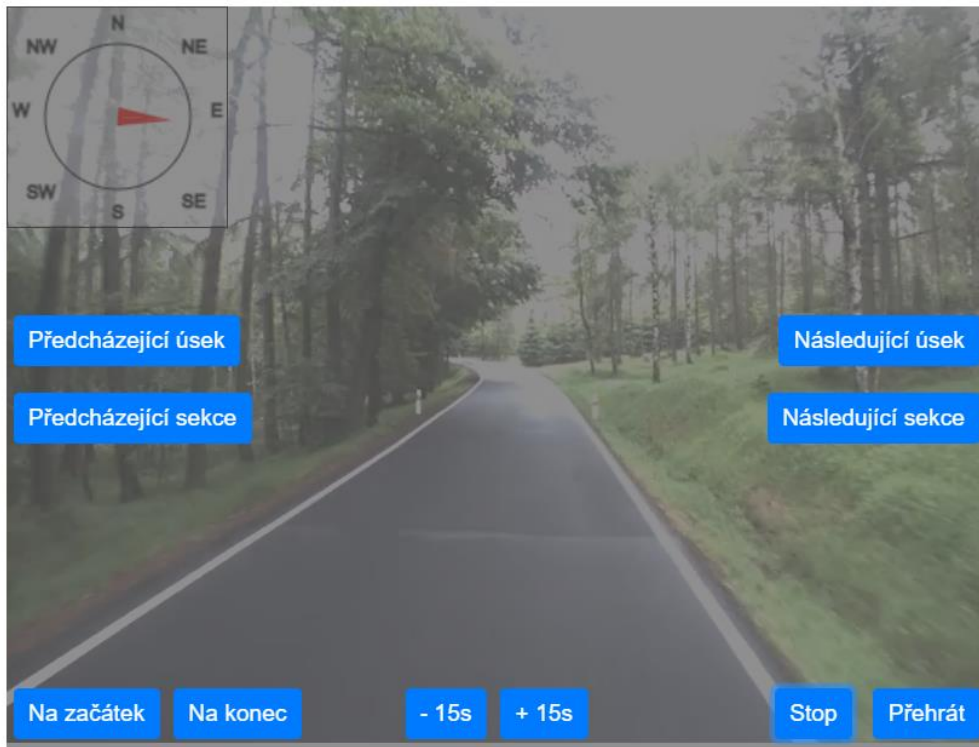
Catalogue of testing

- Project led by CDV-Transpo

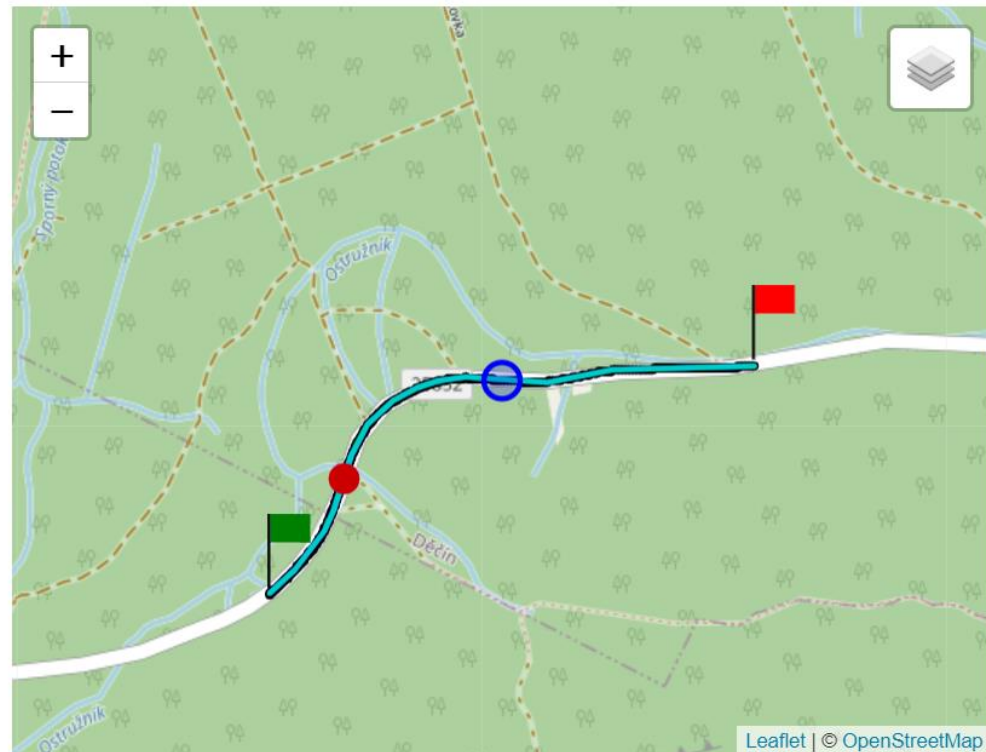


Catalogue of testing areas

Video

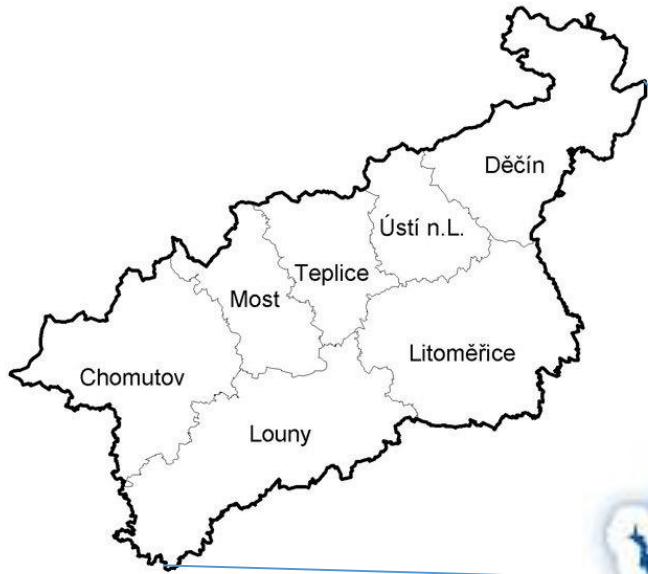


Mapa



<https://testovacioblasti.autonomne.cz/>

Ústí Region



Ústí Region – region in transition

- **Industrial region**
- **Heavily impacted by coal mining industry**
- **Educated people leaving the region**
- **Traditional branches:**
 - chemistry
 - machine-building, engineering
 - metal production

Ústí Region – region in transition

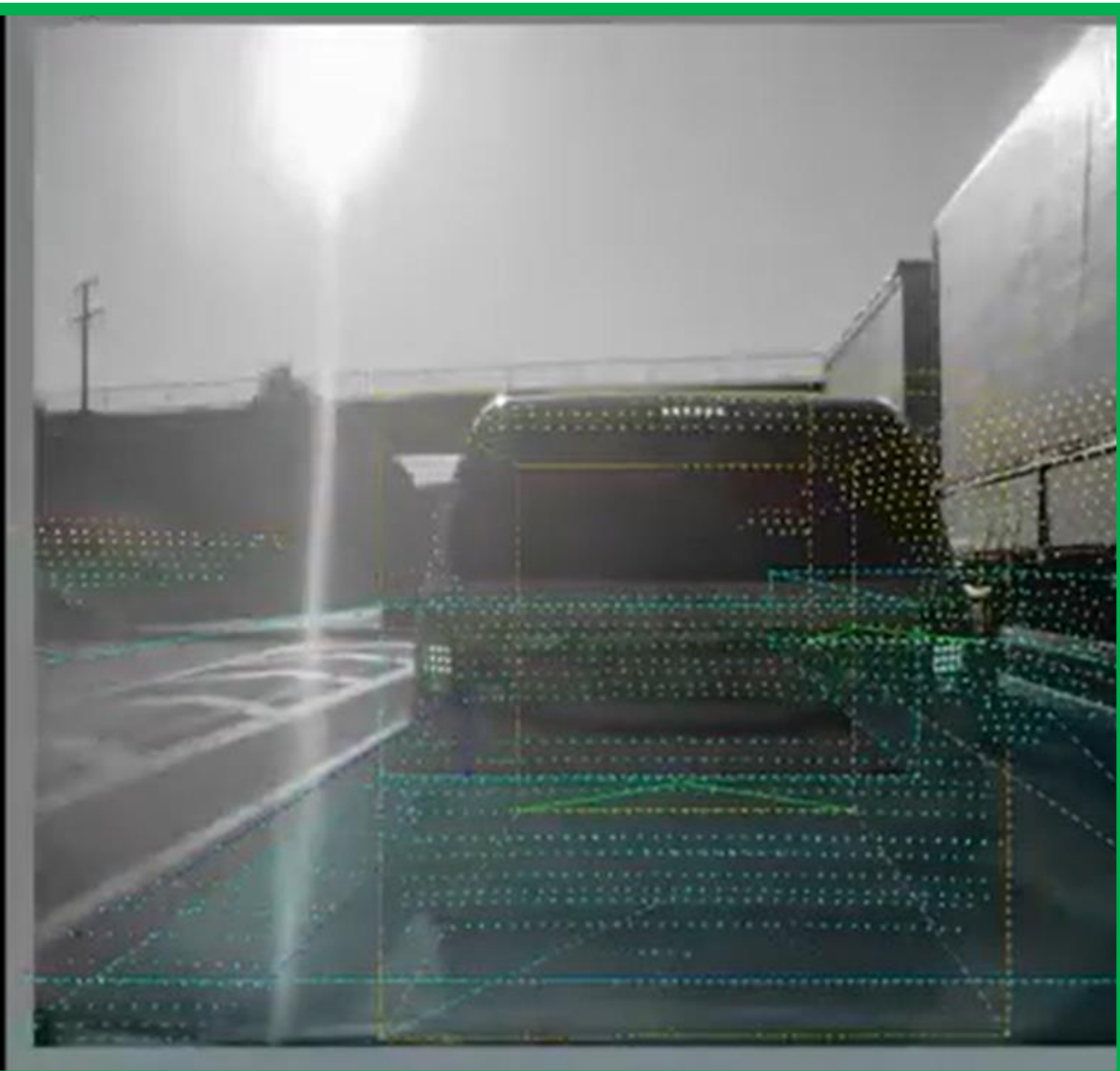
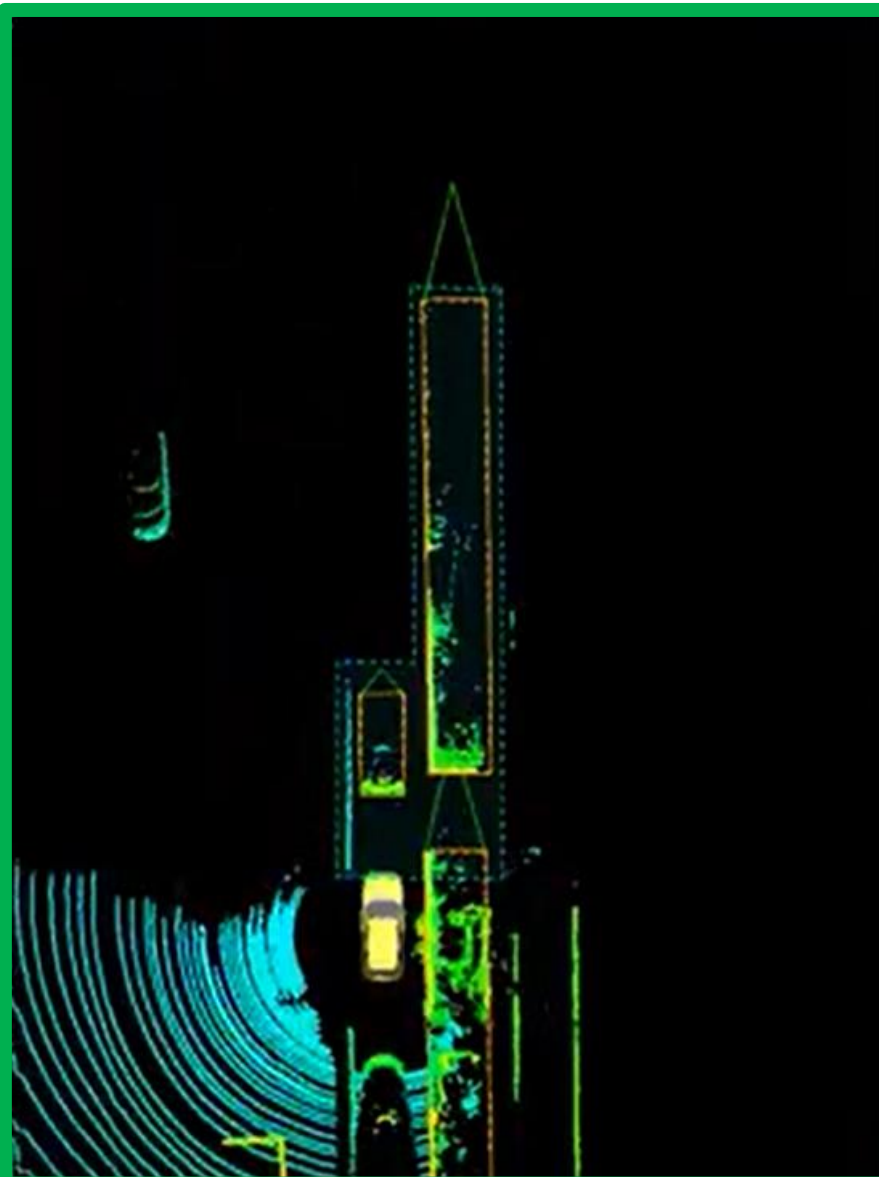
- **Strong automotive background**
- **150+ companies, usually mass production, TIER2-3**
 - AGC, Aisan, Benteler, Hitachi, Grammer, Koito, Magna, Nexen Tire, Rheinmetall Automotive, Valeo
- **S3 strategy priorities - new challenges:**
 - smart mobility, digitalisation
 - clean energy, circular economy

Projects in Ústí region area

- **Annotation LAB**
- **U SMART zone**
- **5G to Ústí**
- **Usti4Tech**
- **Autodrome Most**
- **AD-LIME**

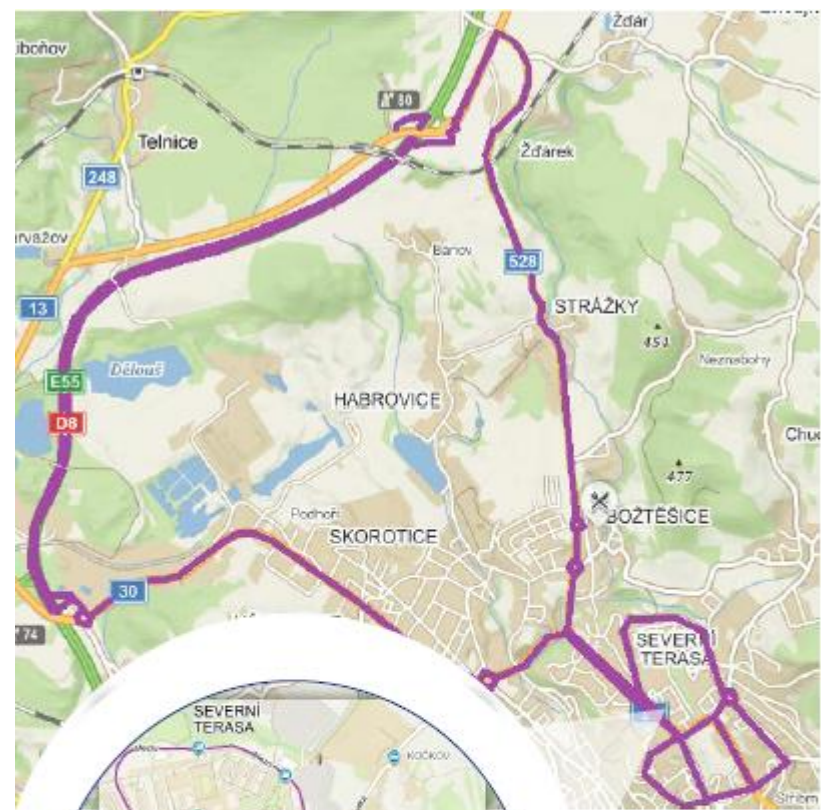
Annotation LAB

- **EGO outer environment recognition**
 - static/dynamic objects
 - various environment (urban, countryside, highway)
- **Located in Ústí nad Labem**
- **Operational since 2/2017**
- **Collaboration VALEO – UJEP – CTU**
- **Students as workforce (early phase)**



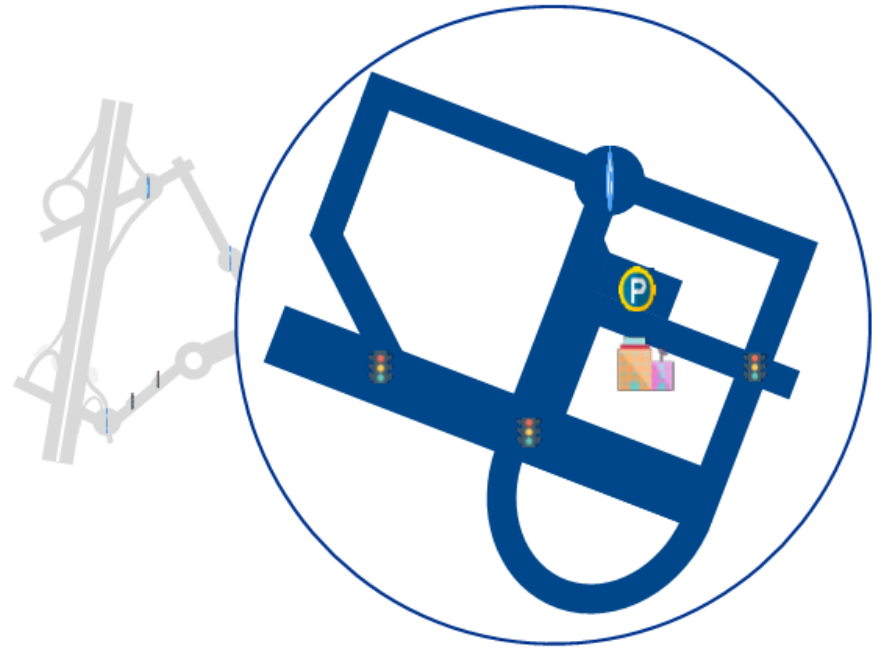
U SMART ZONE

- **Pre-feasibility study (2019)**
- **Zone for testing higher-level control systems in open environment**
- **Nearly 27 km of roads, consisting of two circuits**



U SMART ZONE

- **Circuit A** - primarily intended to simulate real urban transport with a wide range of types of roads and road transport elements
- **Circuit B** - suitable for testing highway connections





Na Rondelu

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The most risky place in 2017-19

"... The road separates the local housing estate from the business zone. Not only cars but also pedestrians are important actors in traffic accidents... "



Number of accidents: 35
Fatalities: 0
Serious injury: 2
Light injury: 19



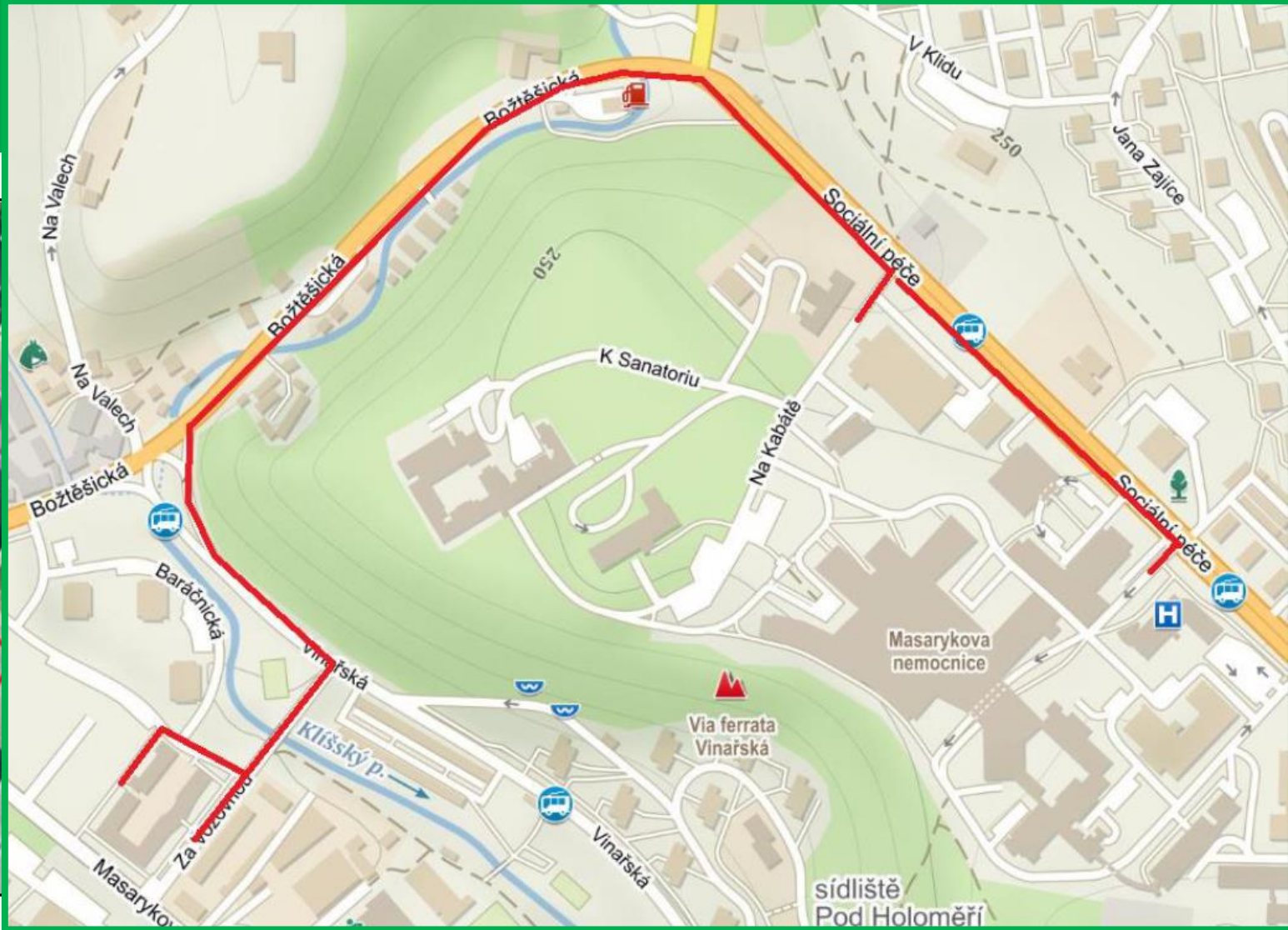
U SMART ZONE current state

- **Step by step approach**
- **Critical safety issues fixed**
- **C-ITS on 2 traffic lights controlled junctions installed and in process of testing**
(based on C-ROADS standards: ITS-G5 + LTE communication)
- **Focus on digital infrastructure**
- **From automated vehicles only to smart mobility**

Possible use cases, areas of research

- **Interaction with public transport at stop-type stops;**
- **Interaction with the rescue system components;**
- **Responses of autonomous systems to changes in the environment in which they operate** (motorways vs. quadrilateral, directionally divided urban roads vs. dual-directional undivided urban and extravilan roads);
- **GNSS signal transmission in urbanized environment - reliability and accuracy testing**

U SMA



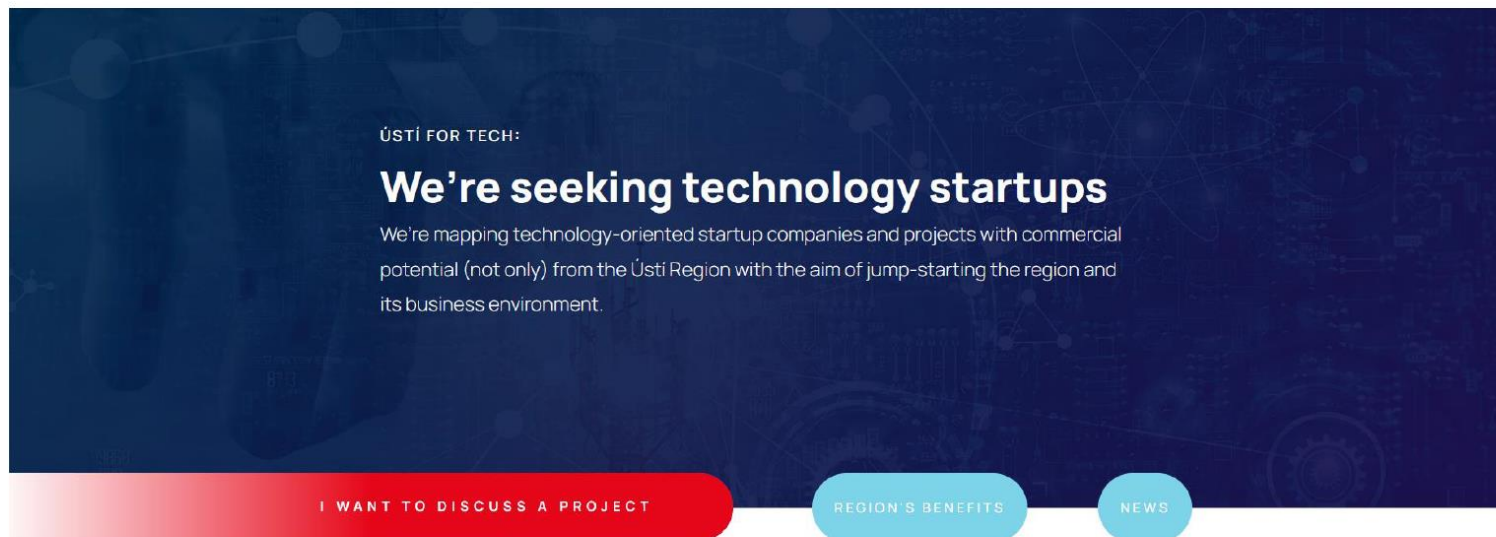
5G for 5 cities (5G to ÚSTÍ)

- **National pilot project led by Ministry of Industry and Trade**
 - 5 cities, 5 topics
 - Ústí nad Labem – automated mobility
- **Project delayed due to COVID-19**
- **5G pilot projects to be financed within RRF**
- **Call for proposals expected 4Q/2021**

Usti4Tech

NEW

usti4tech.cz



ÚSTÍ FOR TECH:

We're seeking technology startups

We're mapping technology-oriented startup companies and projects with commercial potential (not only) from the Ústí Region with the aim of jump-starting the region and its business environment.

I WANT TO DISCUSS A PROJECT

REGION'S BENEFITS

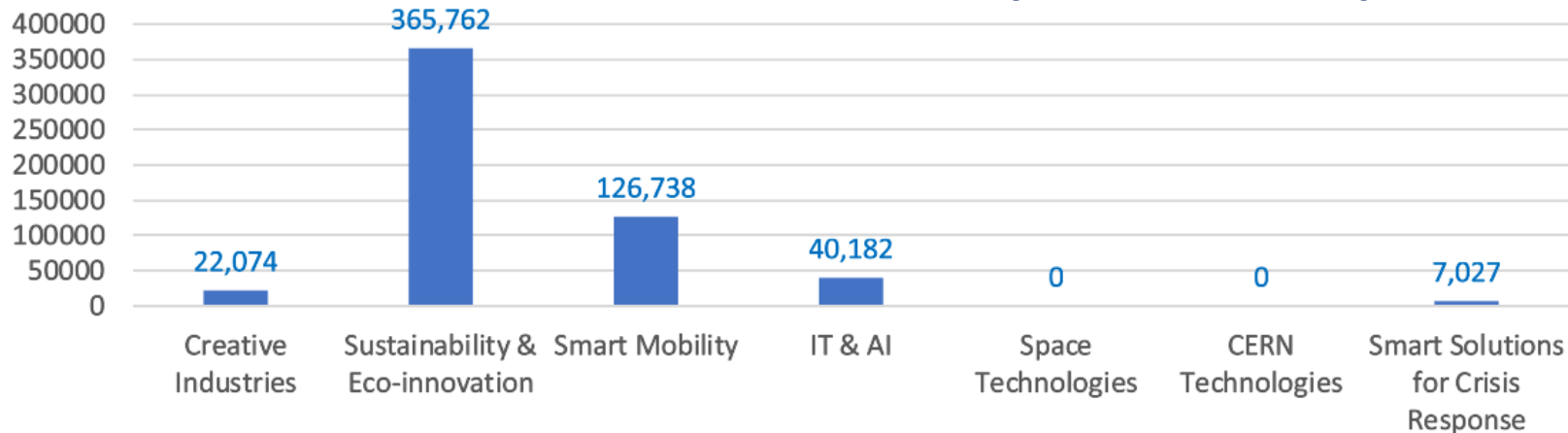
NEWS

- technology-oriented startups
- R&D projects with commercial potential

ANALYSIS

of the absorption capacity of the Ústí Region for technological incubation

V&V PROJECT COSTS (thousands in CZK)



Usti4Tech

Personal mentor,
experts community

fin

Thank
Czech
we no
busin
exper
are h



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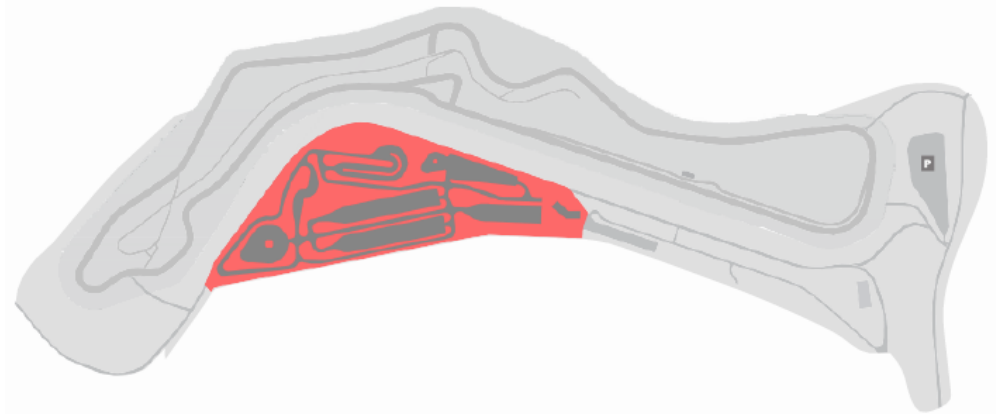
Autodrome MOST

- **Racing circuit**

- motorsport events

- **Polygon**

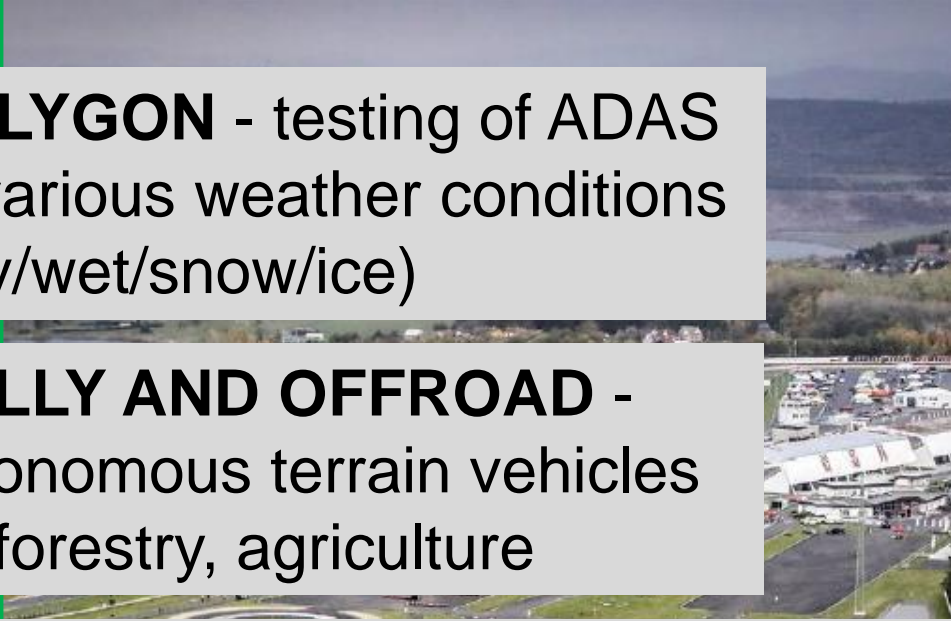
- education and training of drivers in safe driving
- possibility of a wide range of technology testing, including technology focused on autonomous mobility



POLYGON - testing of ADAS
in various weather conditions
(dry/wet/snow/ice)

RALLY AND OFFROAD -
autonomous terrain vehicles
for forestry, agriculture

OFF THE RACE TRACK - service roads
around - suitable for the development of
autonomous municipal vehicles
(multicars), last mile delivery vehicles



AD-LIME

- Automated Driving in Middle Europe
- Data acquisition and provision of elements to level up to SA
- H2020 project
- 30+ partners, 5 countries

Ready for HORIZON EUROPE?



Cross-border collaboration funding possibilities

• HORIZON EUROPE

- EU research & innovation framework programme for 2021-2027 with a budget of €95.5 billion
- Cluster 5 Climate, Energy and Mobility
 - clean, safe and accessible transport and mobility
 - smart mobility
- First calls – May 2021

Cross-border collaboration funding possibilities

- **INTERREG VI A (CZE-SAXONY) 2021-27**

- Priority 1 - A smarter Europe by supporting innovative and smart economic transformation
 - Strengthening the growth and competitiveness of small and medium - sized enterprises
 - innovations; cooperation of SMEs in the application of innovation; sectoral networks and contact centers; transfer of know-how; cooperation of universities with the economy / SMEs; cooperation of SMEs in the field of technological development

Cross-border collaboration funding possibilities

- **Useful links:**

- [Funding and tenders](#)
- [Saxony-CZE programme](#)

CONTACT

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