



Supporting Ecosystem for the Development of New Generation Vehicles

ZalaZONE Autonomous Testbed &
Innovation Ecosystem

Peter Simon, 2022.03.28



The innovation Ecosystem today

The innovation ecosystem is the sum of participants, activities, products, institutions and relationships, including complementary and alternative relationships, relevant for the precipitation of innovative creation” - Granstrand & Holgersson, 2020

An innovation ecosystem can include a system of participants with **cooperative (complementary) and **competitive** (substitute) relationships, with or without any significantly defining corporation or company at its centre.**

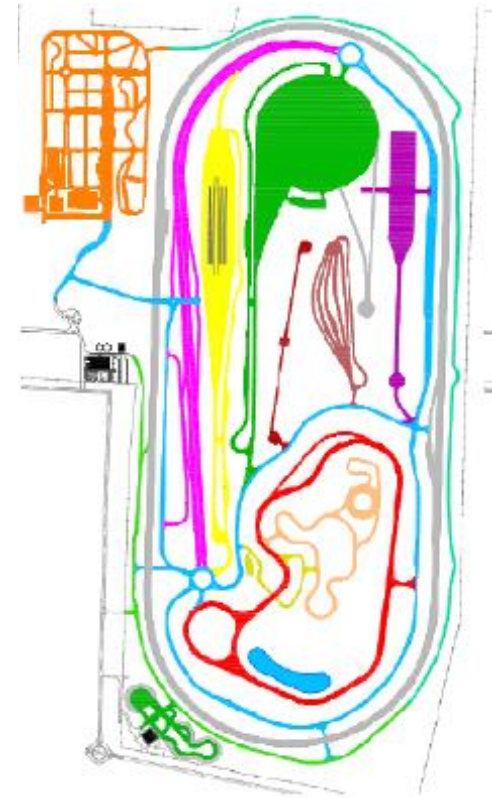
Collaboration instead of competition!

ZalaZONE – basic conception



- growing trends in automated vehicle control technologies
- limited vehicle testing and validation capacities
- basic infrastructure covered by Government project
- project collaboration coordinated between industrial and academic partners

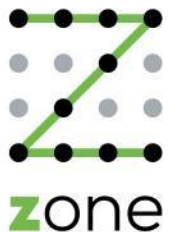
Testbed-Proving Ground project



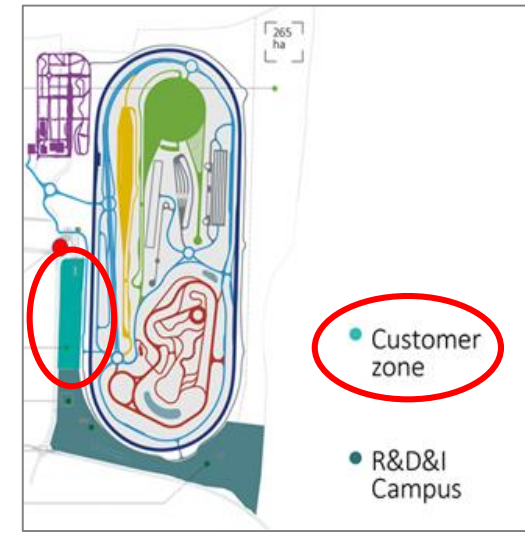
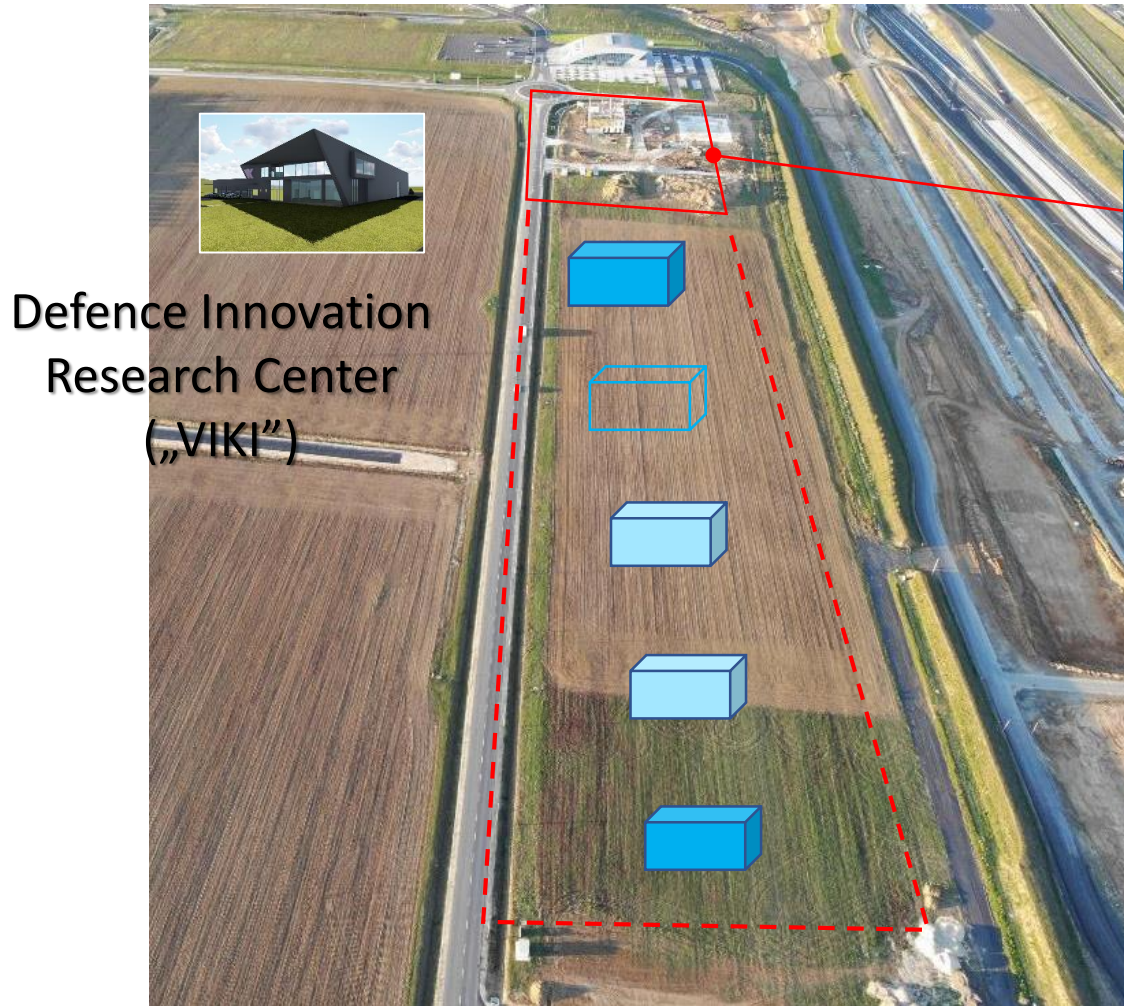
ZalaZONE Science Park & Ecosystem Concept



- Infrastructure
- Equipment
- Knowledge & competence
- Manpower



Industrial partner R&D centre localization

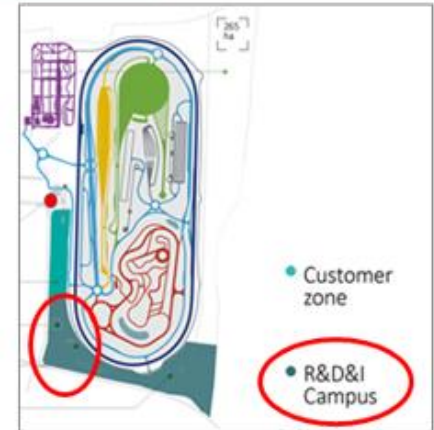


ZalaZONE R&I Centre – University Campus



FUNCTIONS:

- University groups
- SMEs
- R&D projects
- Industrial services
- Labs
- Trainee program



CAPABILITIES:

- Vehicle simulation
- Radar-sensor-camera
- Vehicle measurements
- Industrial systems
- Material analysis lab



Ecosystem Research & Innovation Focus

Complex technology & competence portfolio for industrial developments



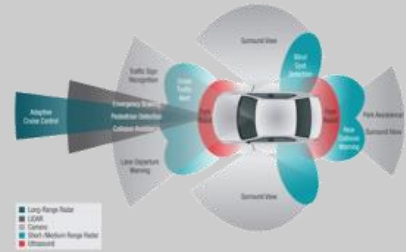
testing • simulation • data • measurements • product planning • materials • manufacturing

Ecosystem Technology Areas

AUTOMATIZATION



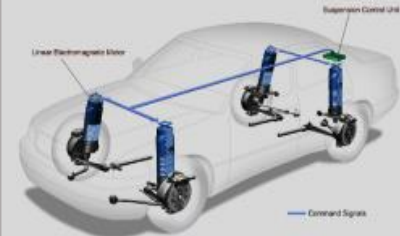
SENSORS



DIGITIZATION



E-MOBILITY



ARTIFICIAL INTELLIGENCE

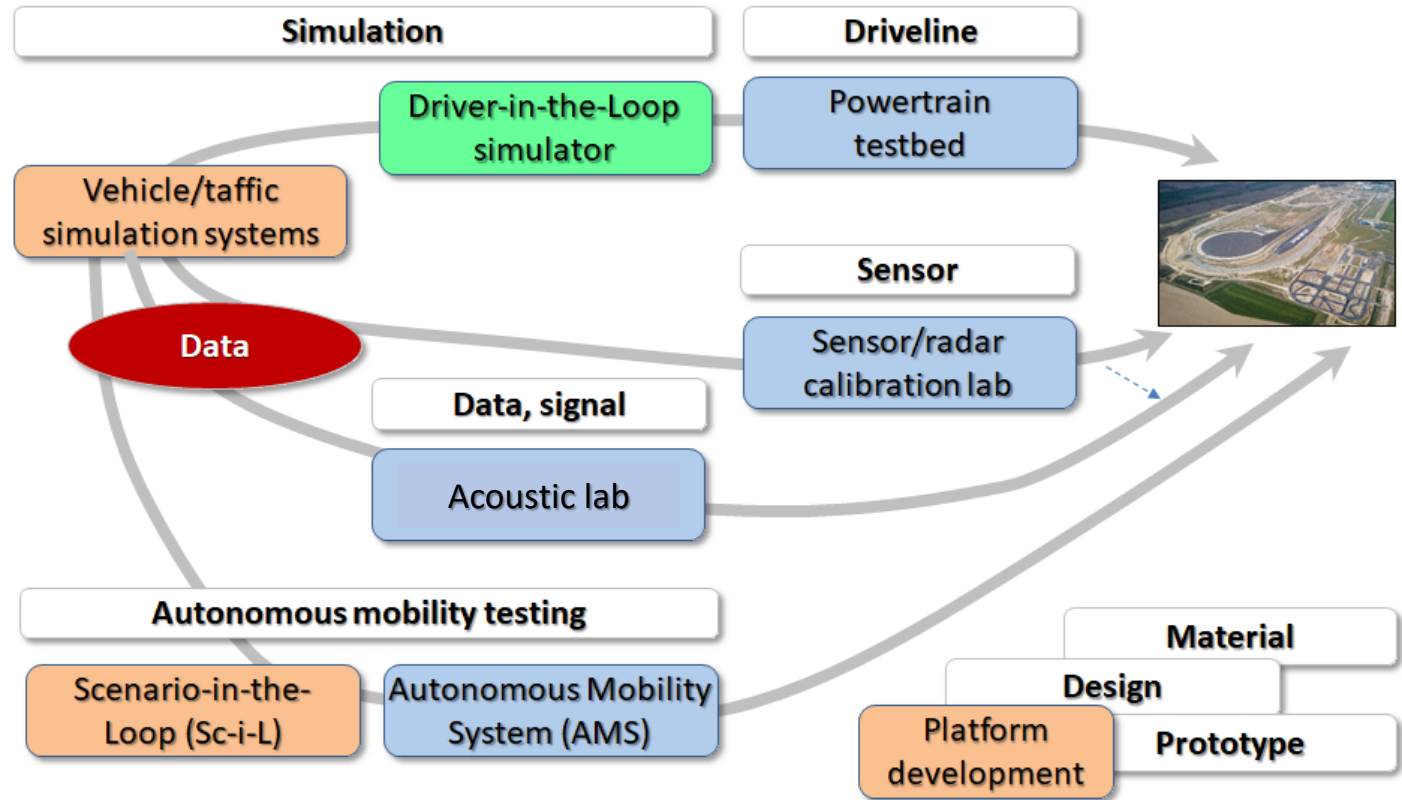


Product testing, validation and development

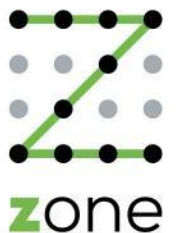
Areas:

- Autonomous mobility
- Industrial technologies, I4.0
- Connectivity, IoT, Cyber-Physical Systems

Research Activity Portfolio



New: Drone technologies BME SZE Bay *Involved institutions*



Laboratory Development

Science Park Labs

- Technology research lab
- Component analysis lab
- System integration lab
- Vehicle-in-the-loop lab

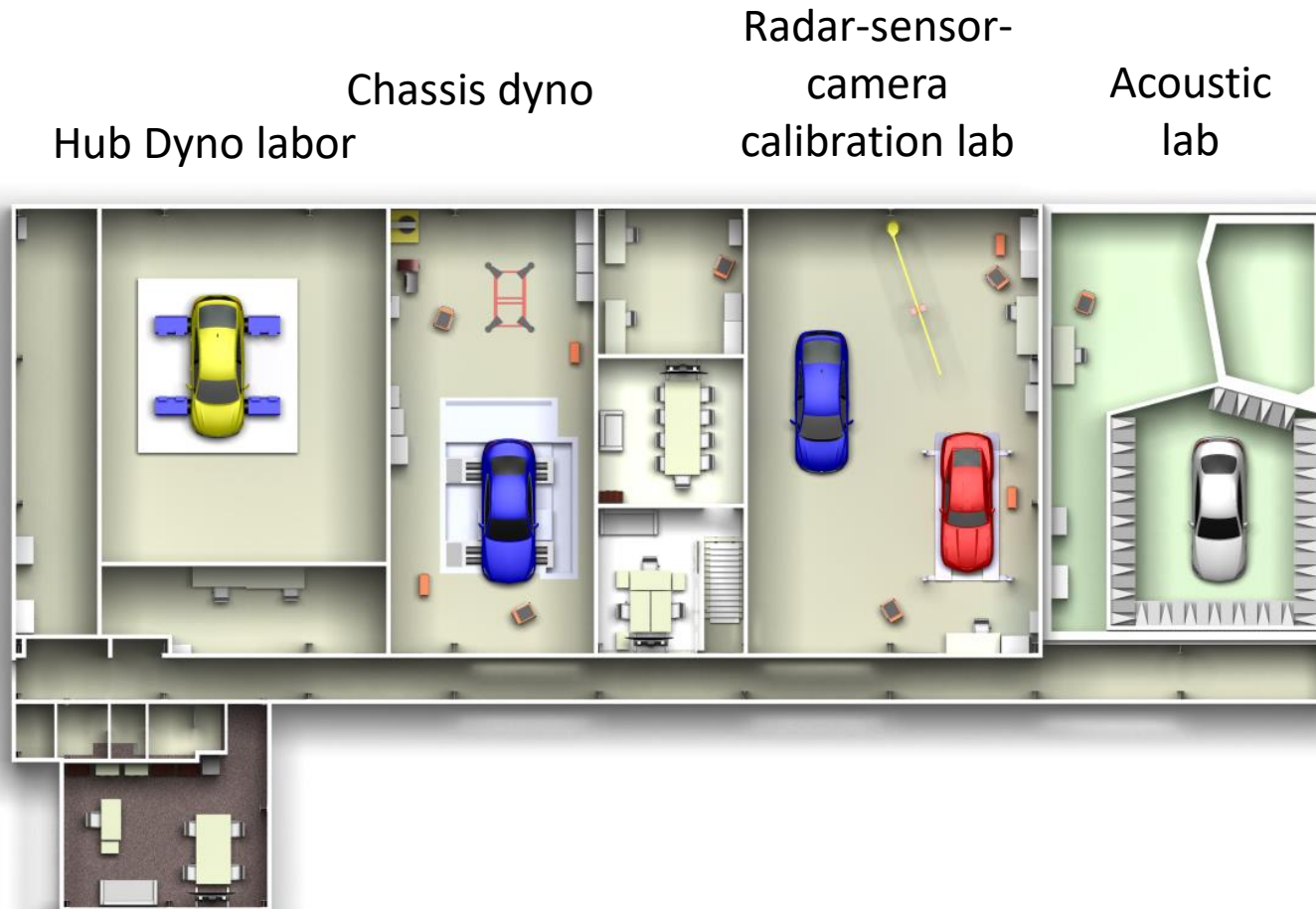


Labs under construction

- ADAS/ADS Sensor Calibration
- Electric Drivetrain Test
- Temperature Test
 - 9x15x9 m
 - -50° ... +80° Celsius
- EMC chamber
 - 20x18x20 m
 - Ø 14 m rotating plate
 - Up to 70 tons of load



Laboratory Development



Other “Ecosystem” facilities

Researcher Accommodation



Start-up Incubation Centre



Lecture Hall & Offices



Ecosystem activities strategic positioning

- Industrial services using existing buildings, equipment, and human infrastructure.
- Industry partner innovation based “extended research” activities using university, science park, & test-bed facilities.
- Supporting the use of the test-bed by the University research groups & partners (including **laboratory/workshop services**).
- Other **specific R&D&I** projects



ZalaZONE Research & Innovation

An overview video

<https://youtu.be/yMZkEScJ3Gk>

THANK YOU



Peter Simon

Research & Innovation Commercial Specialist
Széchenyi István University
SZE JKK Laboratories – ZalaZONE

Mobil: +36 30 128 8484
E-mail: simon.peter.anthony@sze.hu

ZalaZONE Industrial Park Zrt.
H-8900 Zalaegerszeg, Dr. Michelberger Pál út 3.
www.zalazone.hu

***ZalaZONE** ecosystem... providing a location that
FOSTERS innovation and the development &
COMMERCIALISATION of technology where
governments, universities, and private companies
may COLLABORATE!*