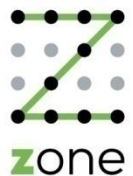




ZalaZONE: Innovation Hub for the Future of Mobility

November 2019



Decision on strategic R&D investment

Unique test facility

Capacity constraints in Europe in area of vehicle dynamic testing

Technology change in vehicle industry – single vehicle vs. co-operative vehicle control: different development environment is required

Decision of Hungarian Government in 2016: „contribution to the European automotive community”

Test field for classic and automated and connected vehicles in Hungary



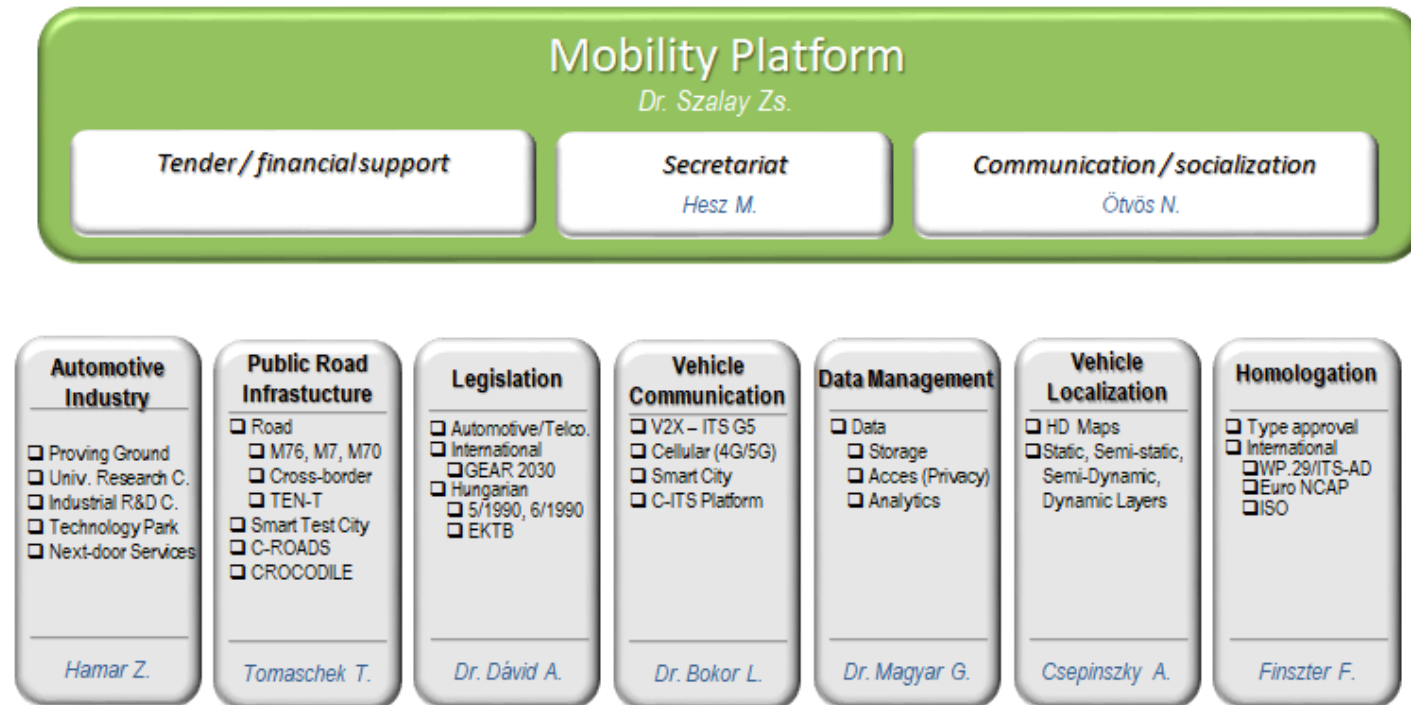
Hungary's Mobility Platform: a Supportive Matrix

a Unique Comprehensive Approach

- Education and Research
- Smart Road Infrastructure
- **Proving Ground (ZalaZONE)**
- ICT Infrastructure
- Legislation and Standardization



Working Groups





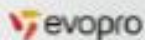
Proving Ground's project CONCEPT

2014-2017

Industrial inputs
Iparági inputok

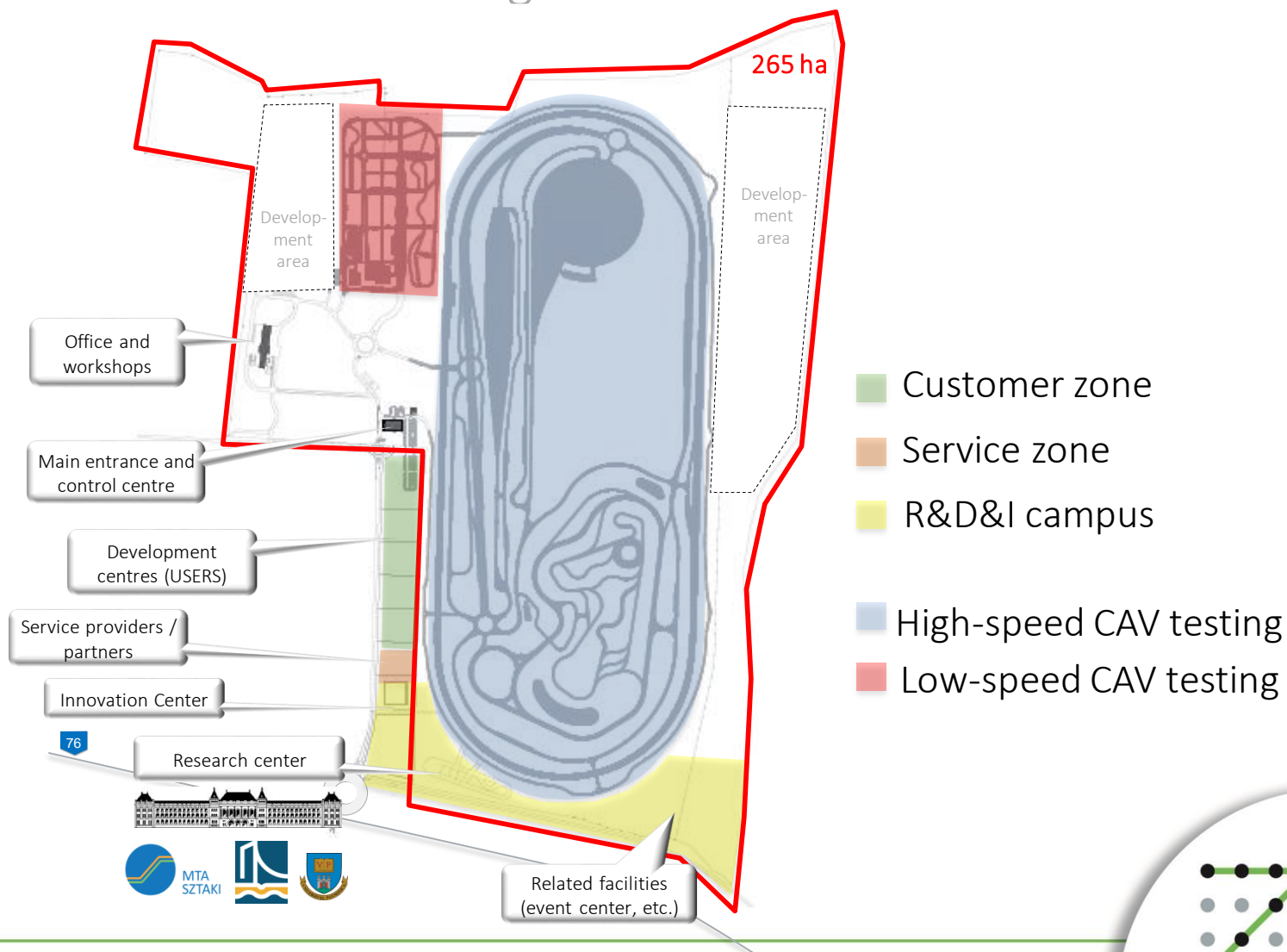
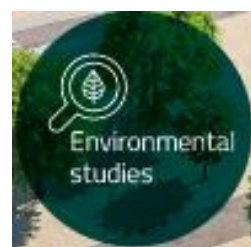


commsignia



Layout of the Proving Ground

Traditional and autonomous testing modules



Test track vision



Phases of the project

Phase 1: 2019 Q2



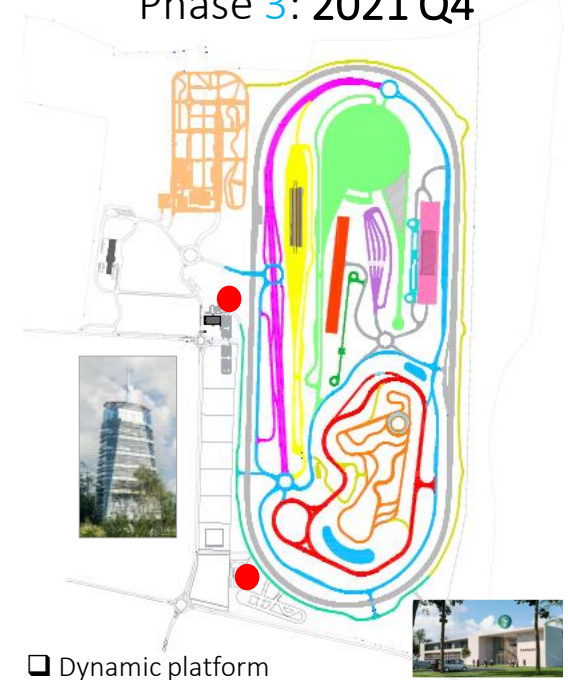
- ☐ Dynamic platform
- ☐ Braking surfaces (Asphalt May 2019)
- ☐ Handling course – high speed
- ☐ Smart City basic road grid I
- ☐ Main entrance building
- ☐ Technical building
- ☐ Innovation (R&D) centre (May 2019)

Phase 2: 2020 Q4



- ☐ Dynamic platform
- ☐ Braking surfaces (braking surfaces Dec 2019)
- ☐ Handling course – high speed
- ☐ Smart City road grid II (full urban network)
- ☐ Rural road – Eastern section
- ☐ Highway section
- ☐ ADAS testing platform
- ☐ High-speed oval (construction start)
- ☐ Main entrance building
- ☐ Technical building
- ☐ Innovation (R&D) centre (University Campus I)
- ☐ V2X networks (C-ITS & Cellular 5G)

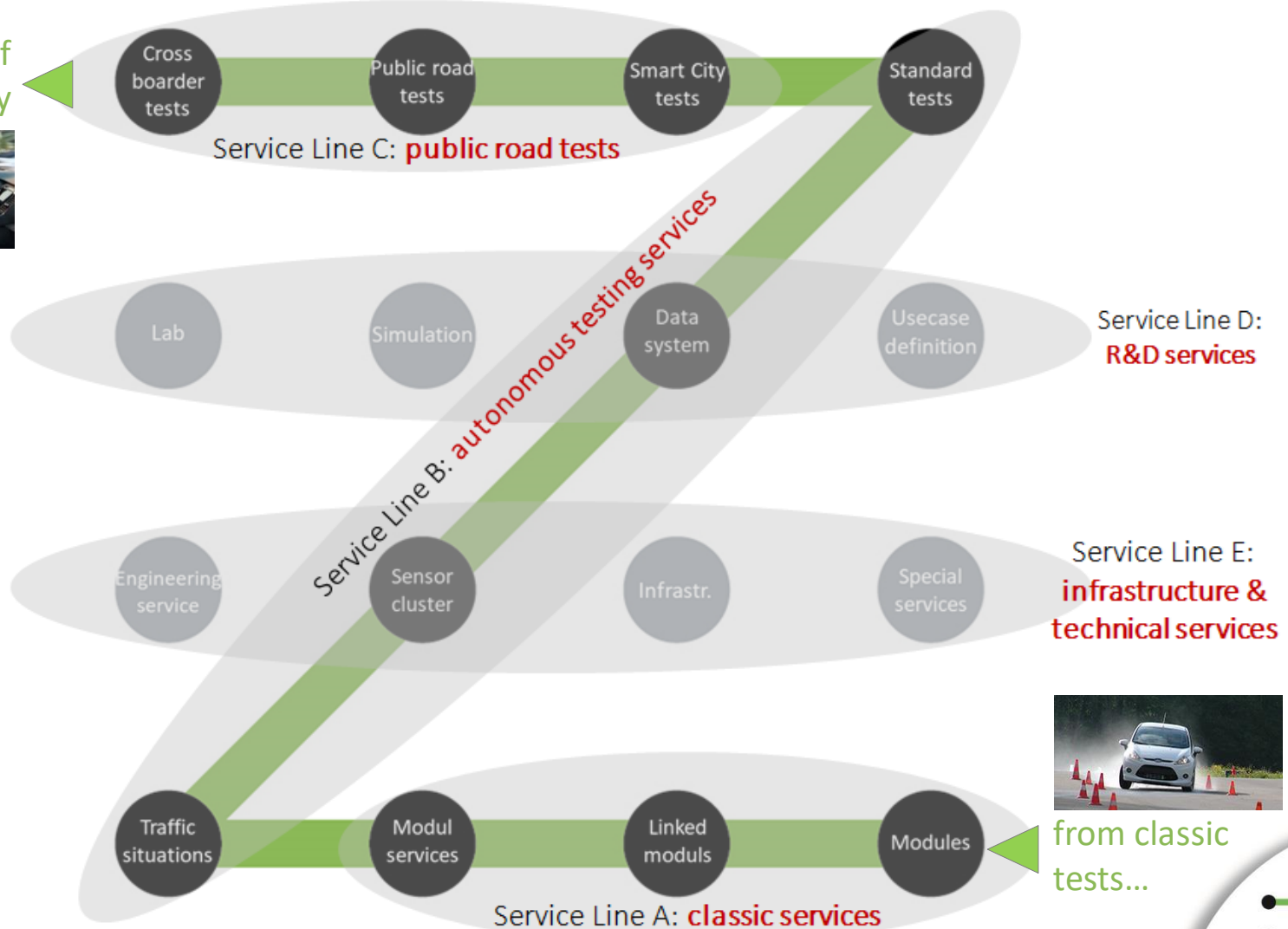
Phase 3: 2021 Q4



- ☐ Dynamic platform
- ☐ Braking surfaces
- ☐ Handling course – high speed
- ☐ Smart City facades, buildings, technology+
- ☐ Rural road – Eastern section
- ☐ Highway section
- ☐ ADAS testing platform
- ☐ Rural road – Southern section
- ☐ Handling course – low speed
- ☐ Further dynamic modules (service catalogue)
- ☐ High-speed oval
- ☐ Main entrance building
- ☐ Technical building
- ☐ Innovation (R&D) centre (University Campus I)
- ☐ Control tower/centre
- ☐ Research centre (University Campus II)
- ☐ Prototype garage

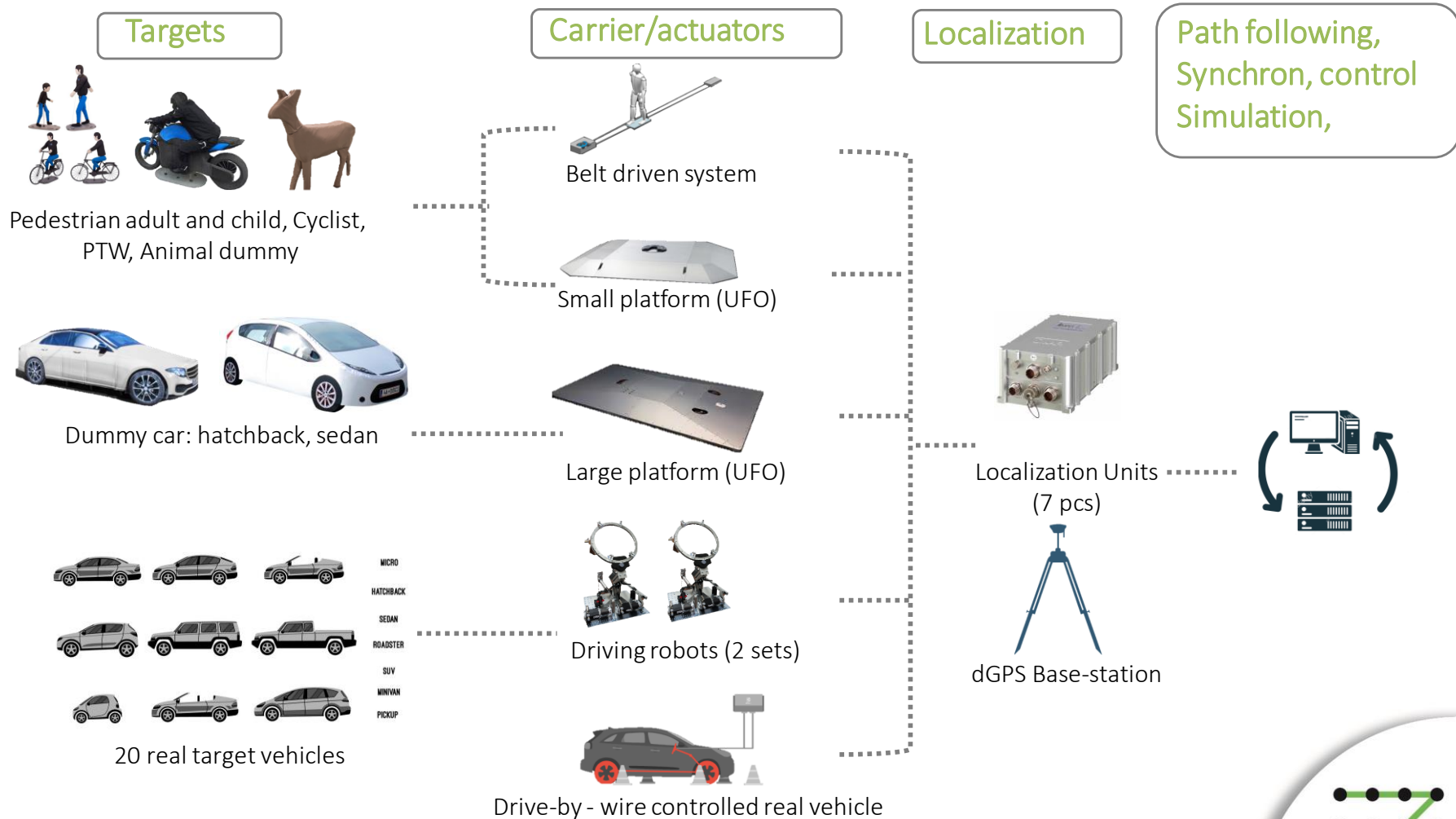
Proving ground service portfolio

...till future of mobility



Engineering Service Tools for AV and V2X

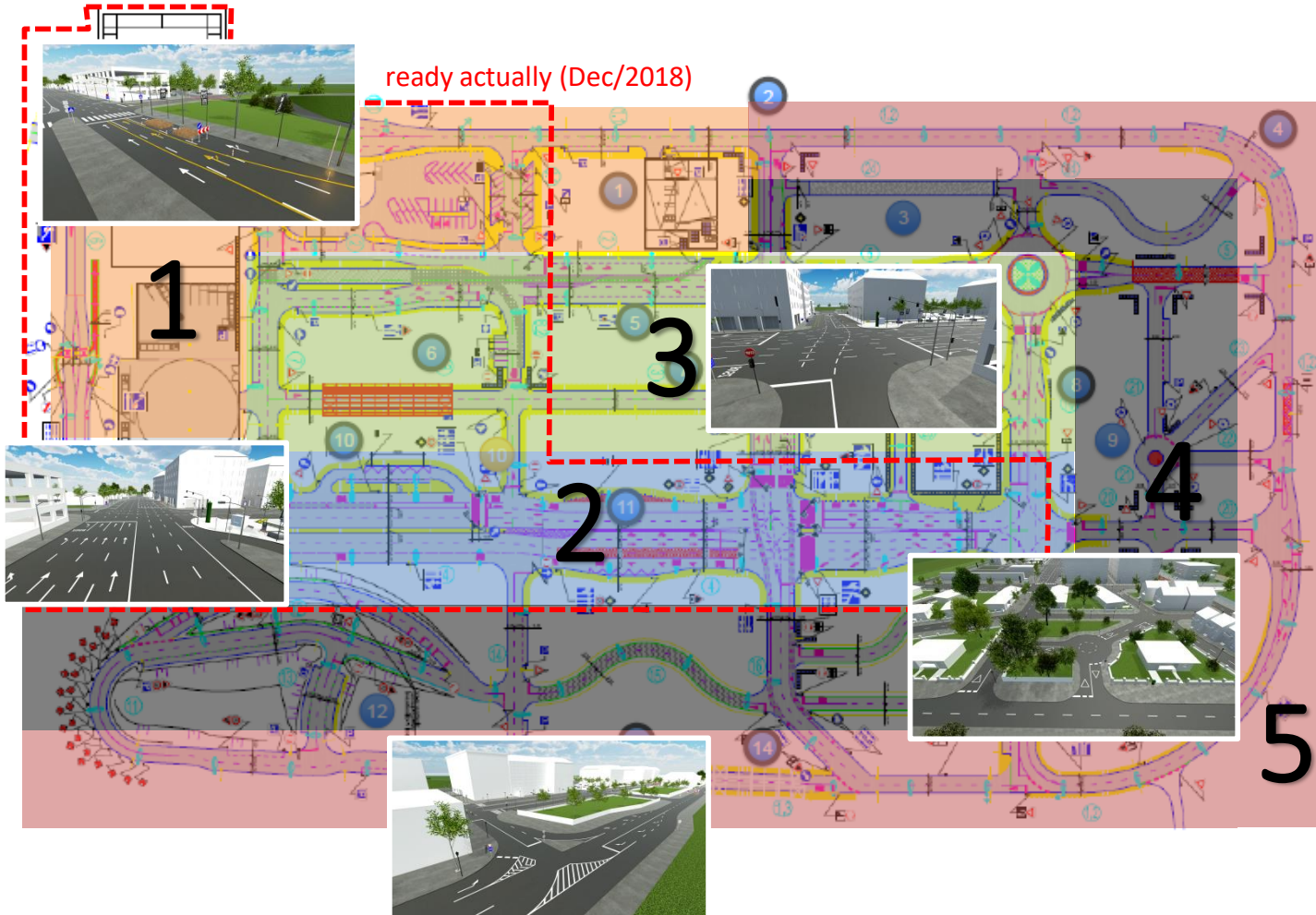
EuroNCAP conform targets and tools



Unique services

Complex Test Scenarios

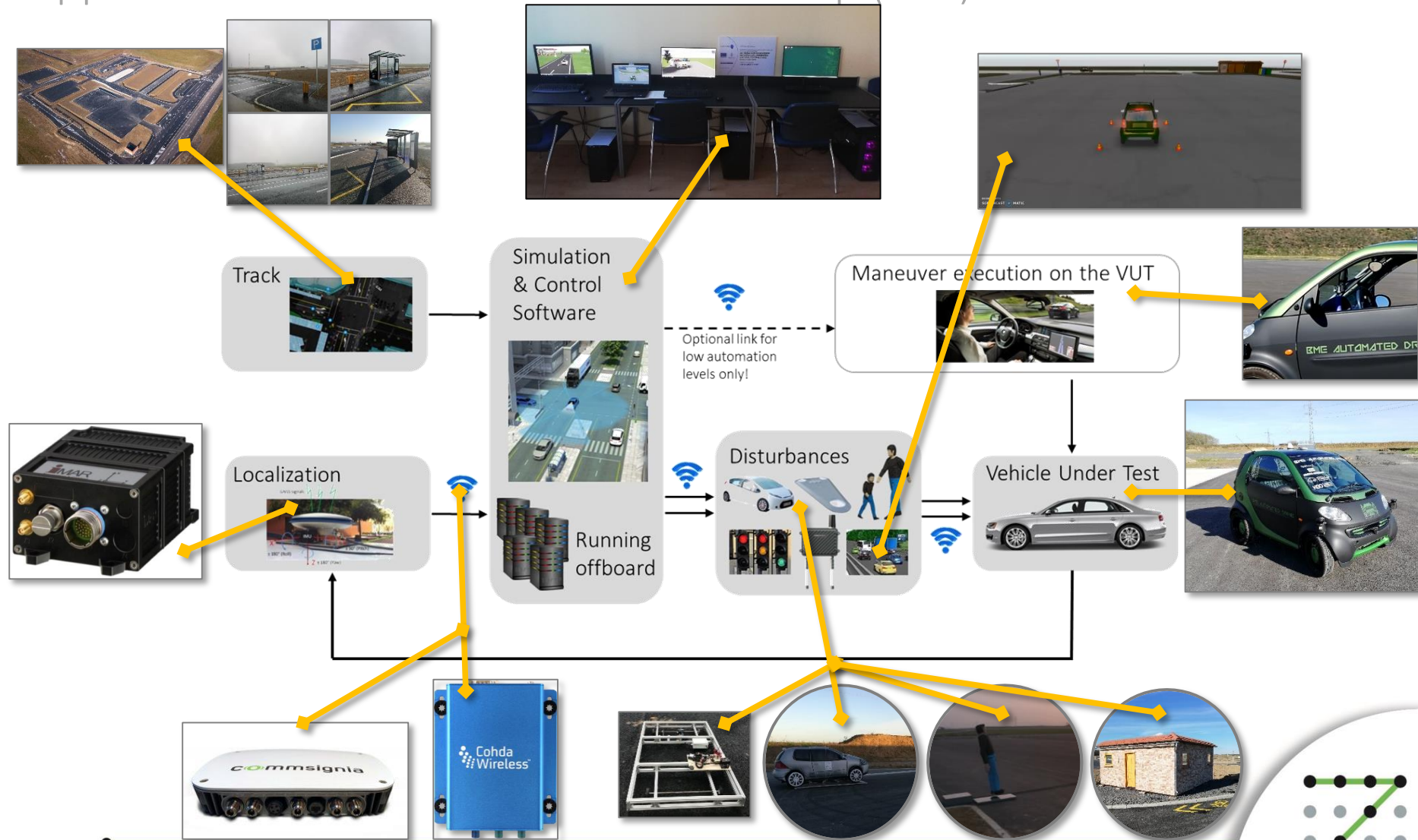
SMART City Zone – Separated Function Zones



1. Low-speed, parking area
2. Multi-lane high speed area
3. Downtown area
4. Suburban area
5. T-junction area

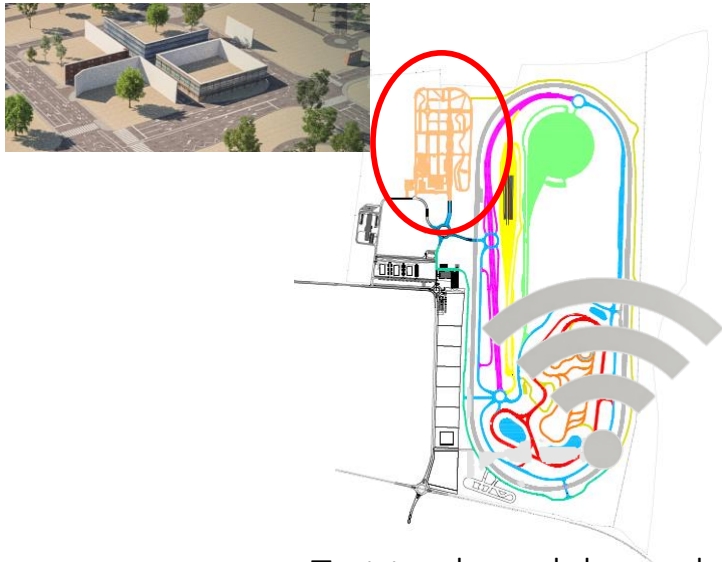
Complex Test Scenarios

Opportunities for the Scenario-in-the-Loop (SciL) Simulation

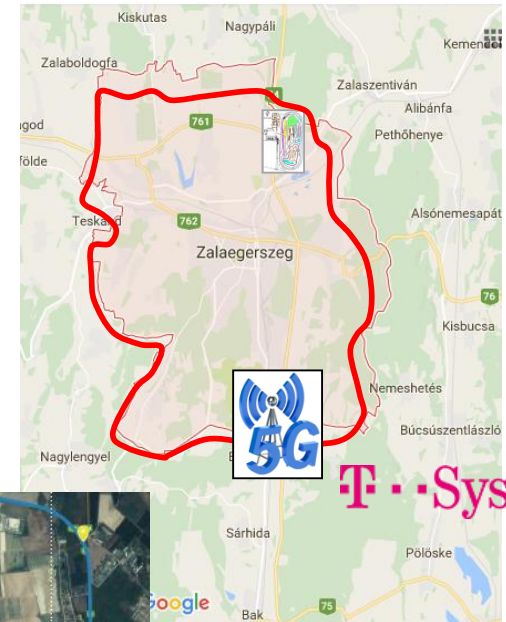


Proof of Concept: Leaving the closed testing environment ...

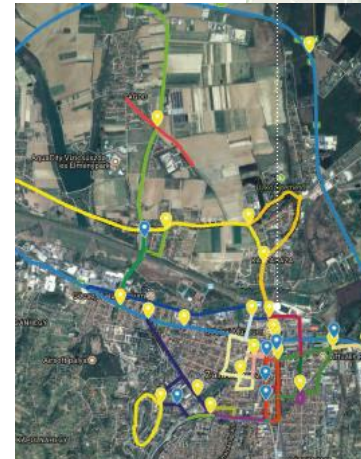
Zalaegerszeg as Smart/Digitalized City environment for Testing



Test track modules and scenarios for **controlled and repeatable tests** in a safe environment



City environment for random **real-life testing**

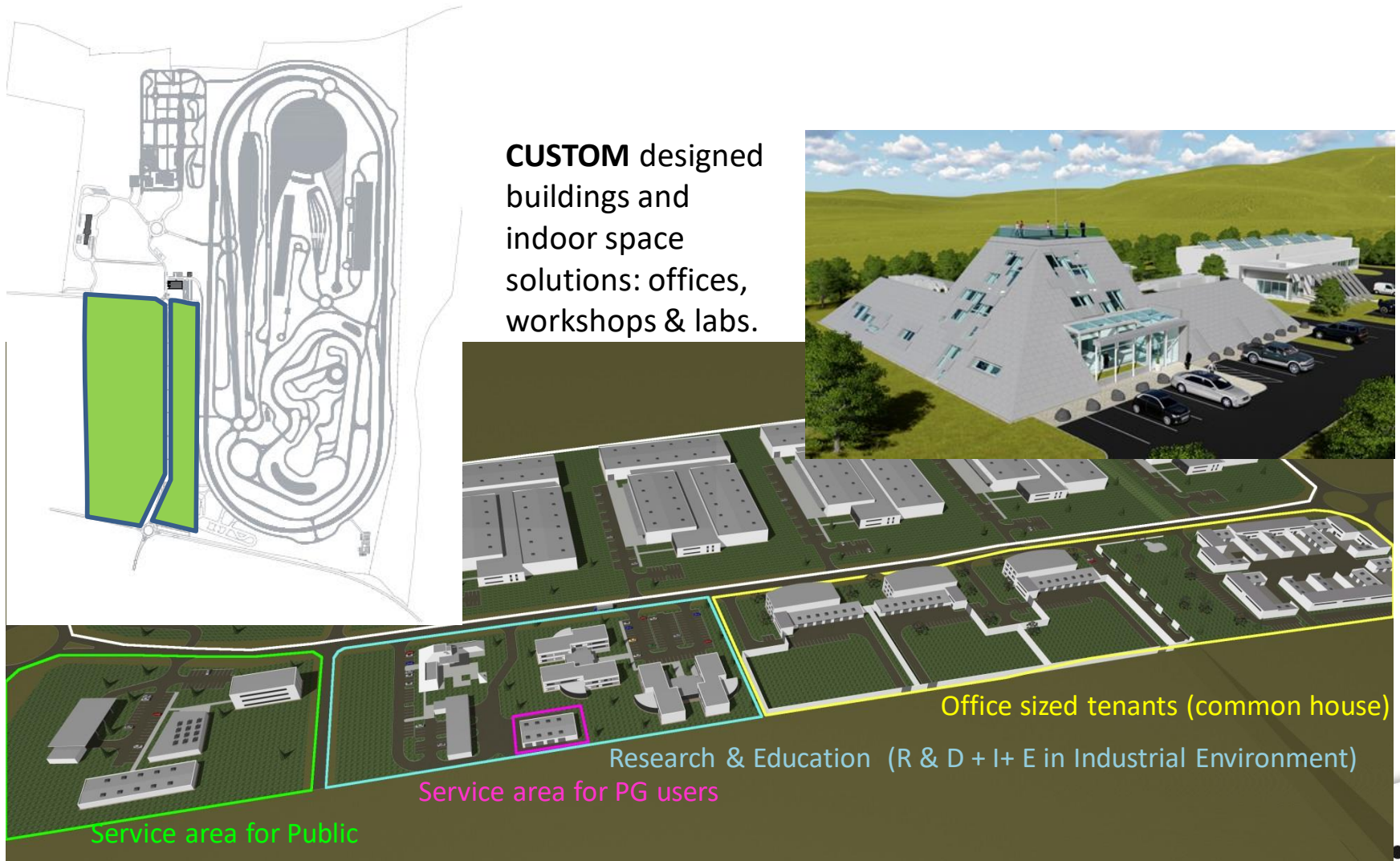


High speed testing in real environment – “Triple loop”

Loop_3: International roads



ZalaZONE Science Park... an integrated business zone



ZalaZONE: Partner / Customer Dynamic Environment



Deployment through Partnership & Collaboration



For more information visit

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ZalaZONE - Region Zala

