



AUTOMATED DRIVING

URBANISM NEXT EUROPE
2021 

How can sustainability and road automation co-exist in future urban transport?

5E: Dr Mickael Pero, Prof. Bert van Wee, Dr Nick Reed,
Dr Nikolas Thomopoulos, Wolfram Klar, Dr Wolfgang Backhaus
WISE-ACT session

 @UrbanismNextEU #UNextEU 

Growing
ideas
through
networks

URBANISM NEXT EUROPE
2021

9-10-11 JUNE, 2021
ONLINE CONFERENCE



COST - Europe's leading networking tool

Dr Mickael Pero, *Science officer*



Funded by the Horizon 2020 Framework Programme
of the European Union

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10 June 2021

COST - 45 years proven track record in research collaboration

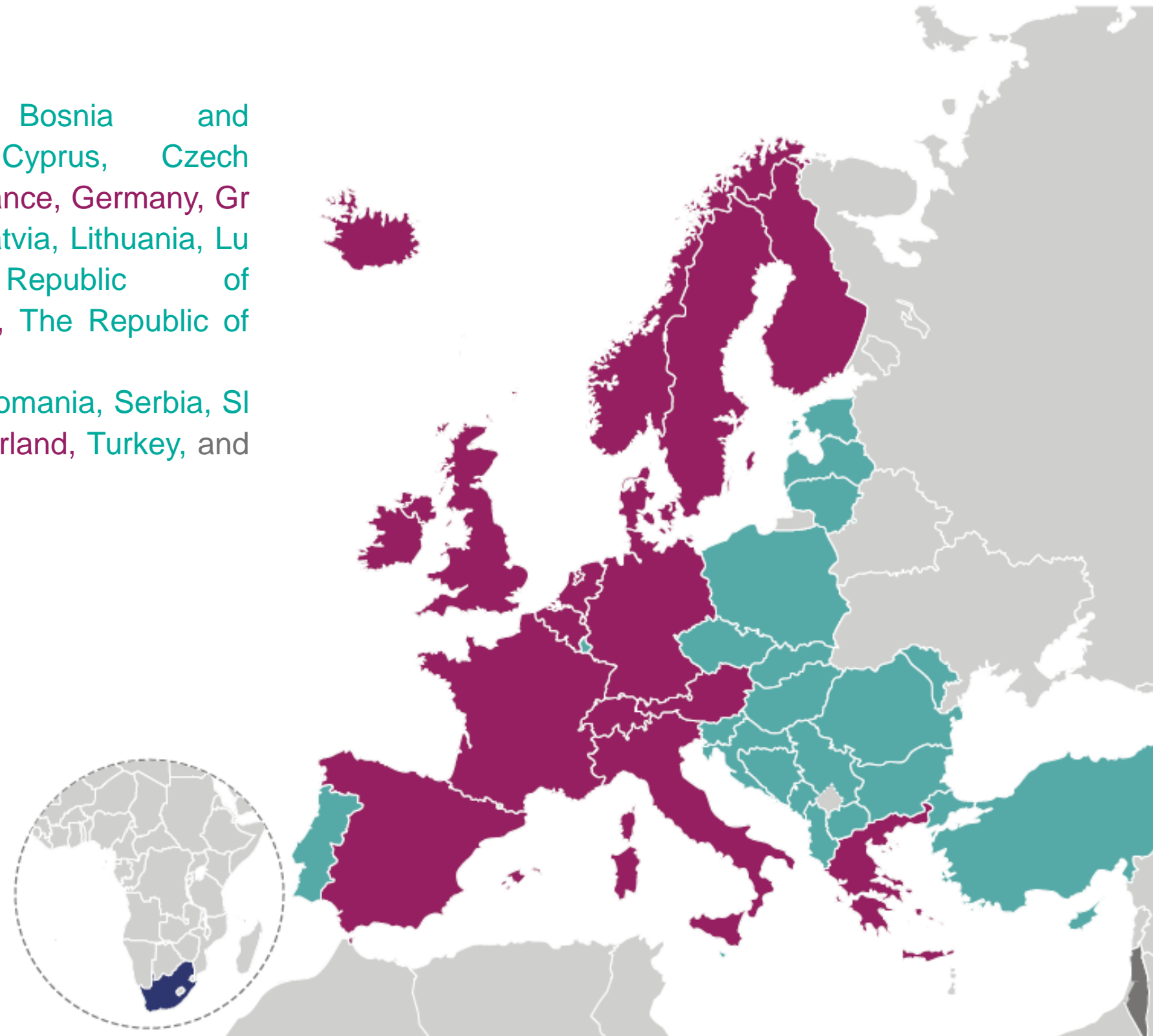
- COST Members

Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, The Republic of Moldova, Montenegro, The Netherlands, The Republic of North Macedonia, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, and United Kingdom

- Cooperating Member
Israel

- Partner Member
South Africa

- Near Neighbour Countries
Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Jordan, Kosovo*, Lebanon, Libya, Morocco, Palestine**, Russia, Syria, Tunisia and Ukraine



COST global networking

1 Partner Member

South Africa

16 Near Neighbour Countries

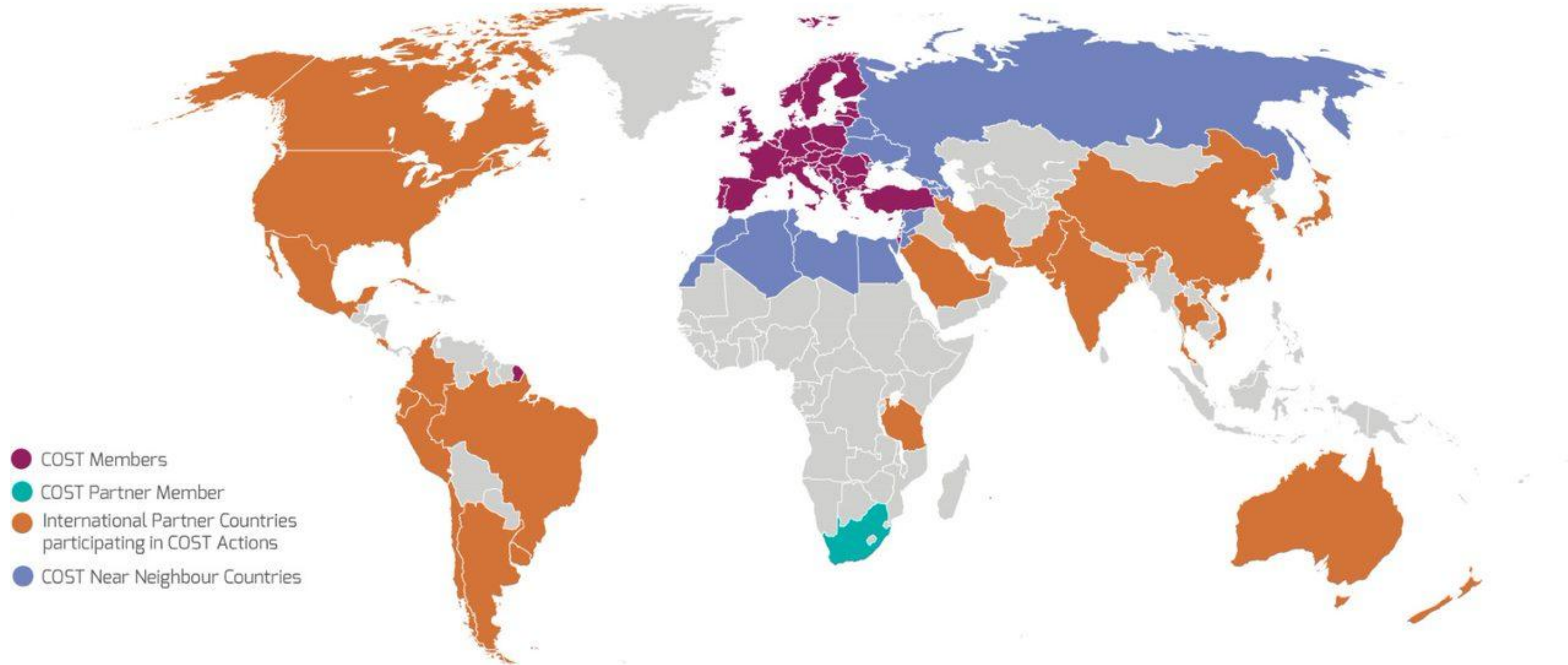
Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Jordan, Kosovo*, Lebanon, Libya, Morocco, the Palestinian Authority, Russia, Syria, Tunisia, and Ukraine.

International Partner Countries

currently participating

International Partner Countries

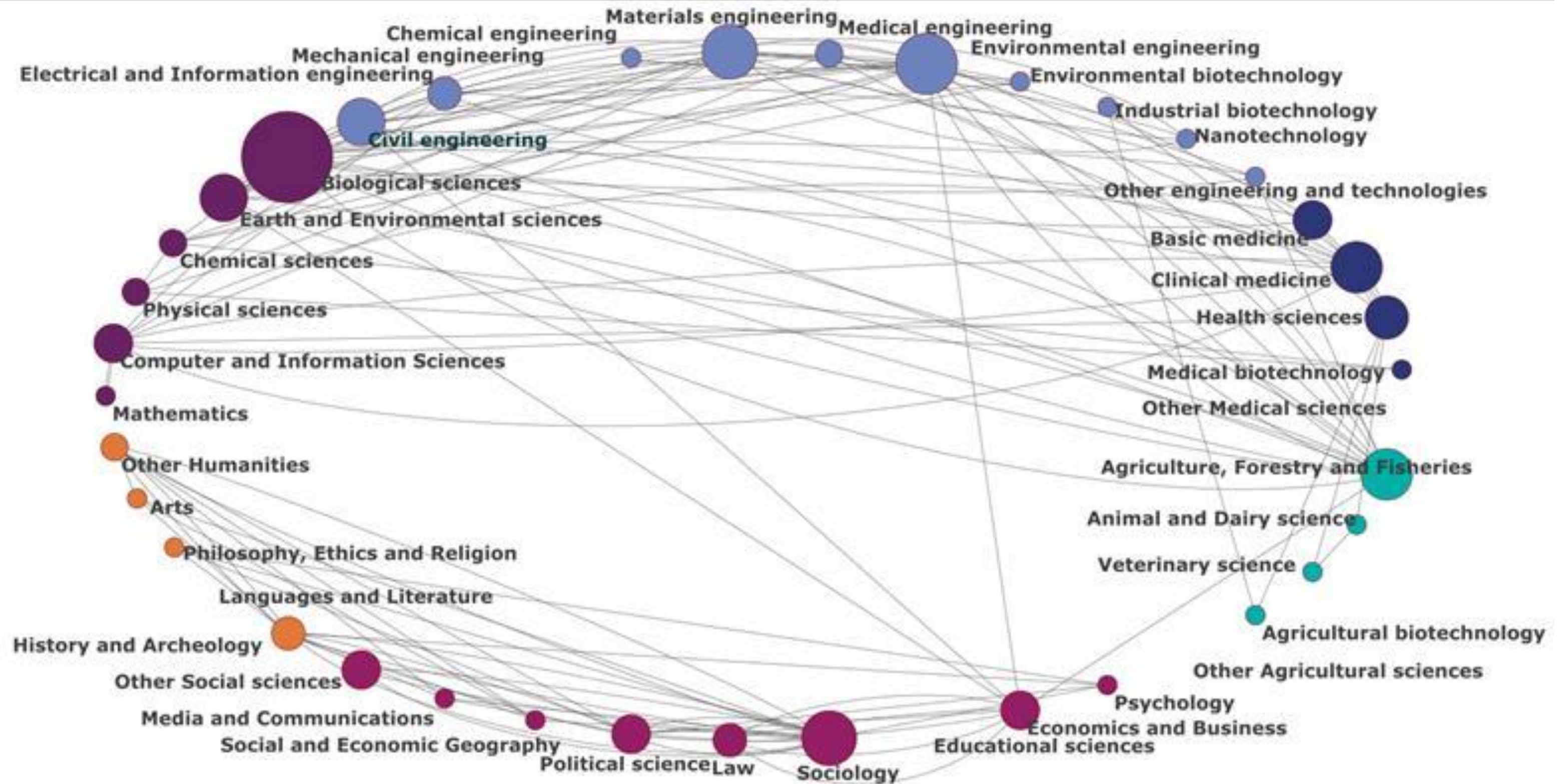
Can also join COST Action



COST Actions

- Feature self-established scientific programme based on a challenge identified by the research communities
- Aim to advance the state of art and can be adapted to the evolving needs of science and community
- Provide a set of networking tools based on mutual benefit (meetings, training schools, exchange visits)
- Have a strong focus on interdisciplinarity

Priority 2. Fostering interdisciplinary research for breakthrough science



COST Action – Composing of global networks (mutual benefit)

COST Action participants
nominated by COST National Coordinators

Main proposer



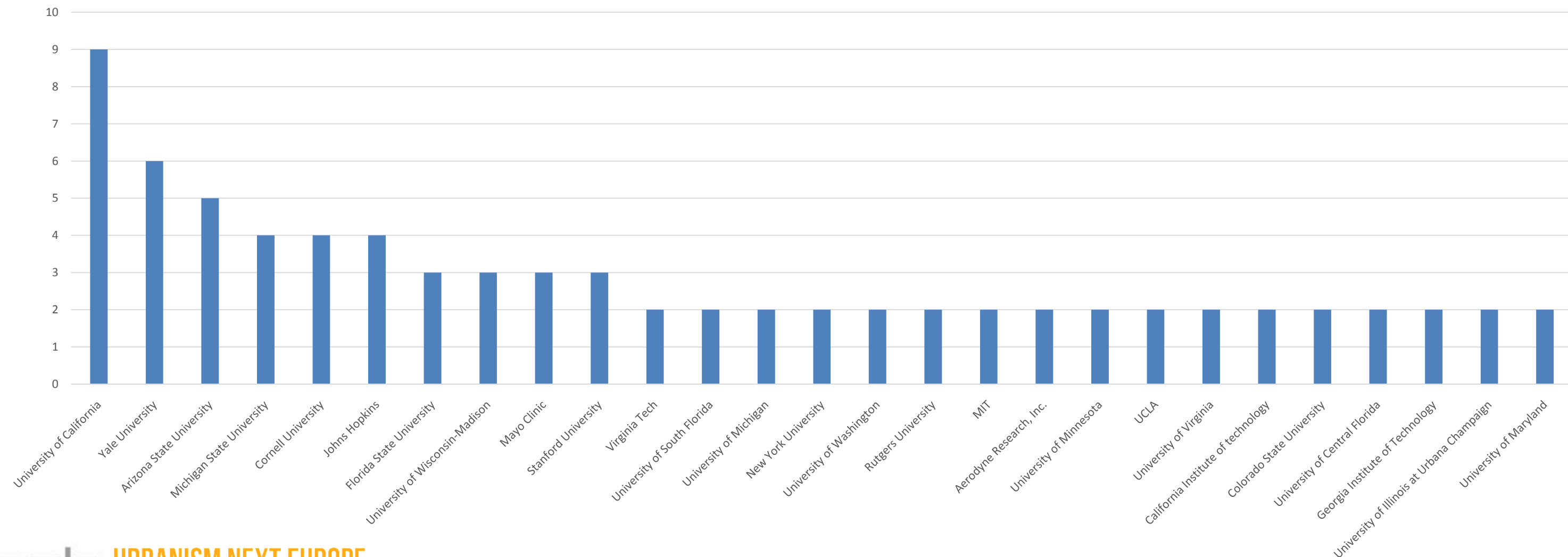
Secondary proposers



International partners
address COST Actions directly

US researchers participation in running COST Actions

- 85 COST Actions, 30% of the running ones
- Affiliated to 125 different institutions – *University of California, Yale University, Arizona State University* with highest number of involvement



Benefits from participating to a COST Action

- Connect to large European networks of specialists
- Increase knowledge about European tools and methodologies
- Career advancement opportunities / common projects
- Get international scientific network recognition / prestige
- Join Actions publication initiatives
- ...

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<https://www.linkedin.com/company-beta/1050548/>



[@COSTprogramme](https://twitter.com/COSTprogramme)



<https://www.youtube.com/user/COSTOffice>



The opportunity for science lies in creating an unlimited space where crossovers between ideas and people can change the world for the better.



Panelist Presentations

5E: Q&A – Ask questions in the chat

Me & My Organisation

- **Delft University of Technology**
- **Faculty: Technology, Policy and Management**
- **Expertise: Transport Policy**



Did you know?

AVs and Sustainability

- **Social:** AVs offer access to destinations for groups who cannot drive
- **Economic:** Do not be afraid of net job losses. Other jobs, not fewer
- **Environment:** more than emissions. Limited access, also for AVs



Me & My Organisation

reed mobility 



www.reed-mobility.co.uk

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Did you know?

- **20 recommendations** by Expert Group to European Commission on CAV ethics
 - Published Sept 2020: <https://bit.ly/3oUYPTM>
- Need for **baseline data** for safety comparisons
- Clarity over how CAVs **comply with rules** (or not!)
- Standardization over **collection and sharing** of CAV data





COST ACTION CA16222

WISE-ACT

Wider Impacts and Scenario Evaluation of
Autonomous and Connected Transport



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of the European Union



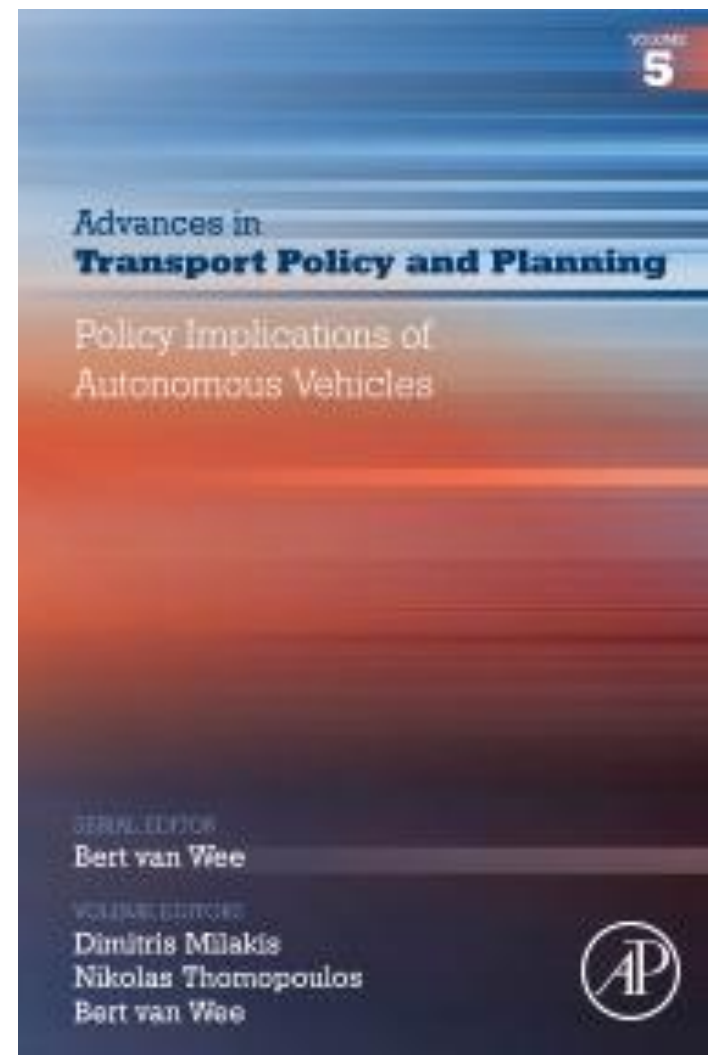
Me and My Organisation



UNIVERSITY OF
SURREY



SWELL
CENTRE FOR SUSTAINABILITY AND
WELLBEING IN THE VISITOR ECONOMY



WG1 Institutional

WG2 Social

WG3 Business

WG4 Demand

WG5 Scenarios





COST ACTION CA16222

WISE-ACT

Wider Impacts and Scenario Evaluation of
Autonomous and Connected Transport



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Did you know?



Special Eurobarometer 496

Report

Expectations and concerns of connected
and automated driving

Etzioni et al. (2020) *Sustainability*, 12, 9765; [DOI:10.3390/su12229765](https://doi.org/10.3390/su12229765)

	GDP p.c.	VoT	Sample Size
IS	56,612€ [1]	>53 € /hr [1]	552
UK	35,748 € [2]	33 € /hr [3]	79
CY	23,543€ [3]	30 € /hr [5]	158
SI	21,766€ [4]	41 € /hr [2]	274
HU	13,923€ [5]	26 € /hr [6]	285
MN	7,464€ [6]	33 € /hr [3]	321



Me & My Organisation

» Wolfram Klar

- Team Leader Automated Mobility & Safety

» AustriaTech

- Federal Agency for Technological Measures

» **Contact point automated mobility:** First point of contact in legal and technological issues for national and international companies and projects

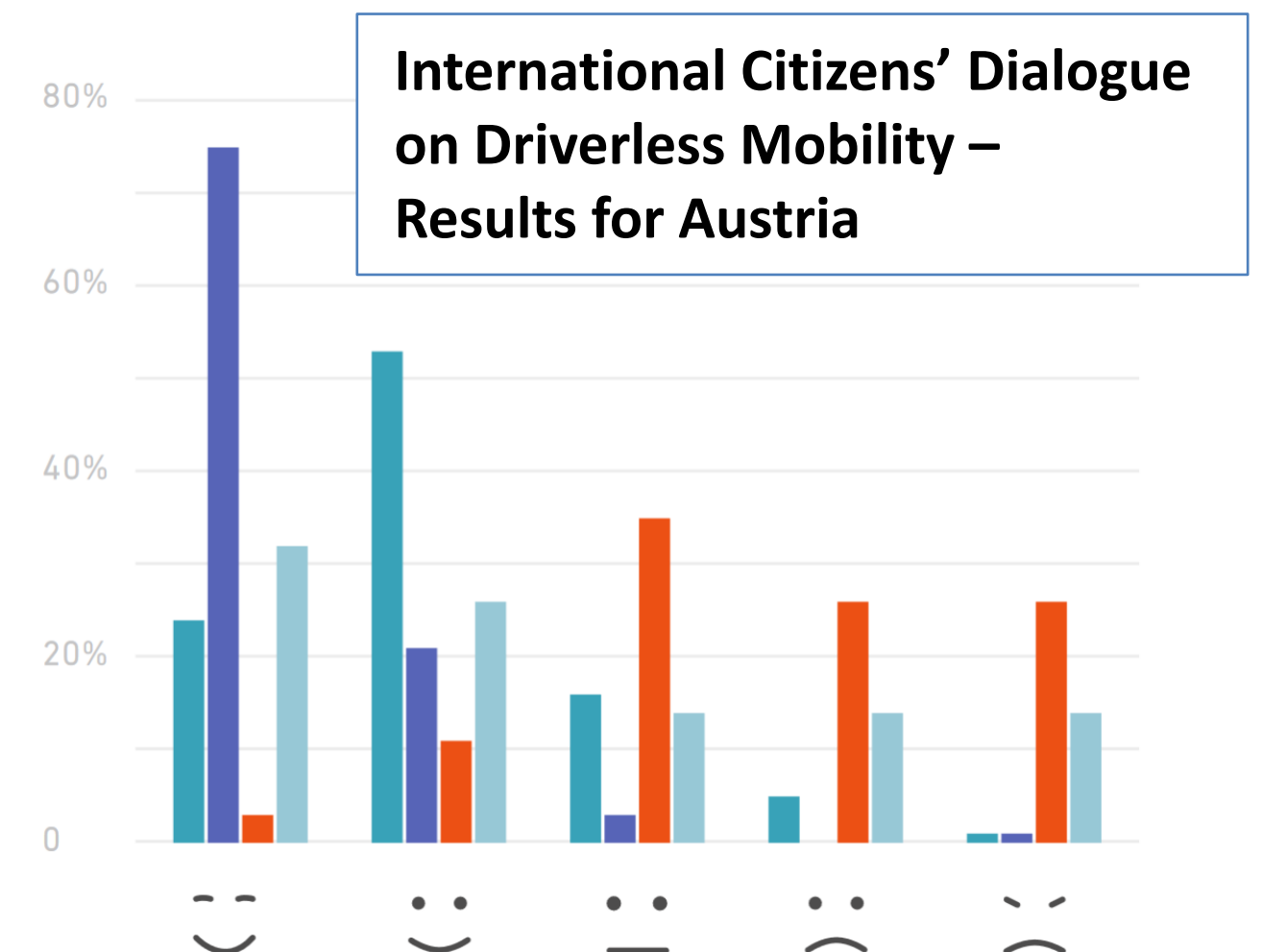
- Supervision of national R&D projects
- Organisation of knowledge exchange
- Dialogue with stakeholders – on national and international/EU level
- Participation in national and international research projects
- Evaluation of applications for testing of automated vehicles on public roads

Did you know?

UN Sustainable Development Goals	3 GOOD HEALTH AND WELL-BEING	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	11 SUSTAINABLE CITIES AND COMMUNITIES	13 CLIMATE ACTION
ARCADE / Knowledge Base		X	X	X	X
AVENUE 21		X		X	X
CCAM PS	X			X	X
CoExist	X		X	X	
ESEMBLE	X	X	X		
L3Pilot	X	X	X	X	
LEVITATE		X	X	X	X
SAFIP	X		X	X	X
ZalaZone, AstaZero, STAPLES	X	X	X		X

Automated Mobility:

- > significant potential to support sustainable development
- > focus needs to be on automated (public) fleets
- > deployment in urban areas and on first/last mile



4 scenarios:

- Private operators with automated fleets
- Public transport as mobility backbone; significantly automated
- Privately owned automated cars
- Improving the existing mobility system without automation

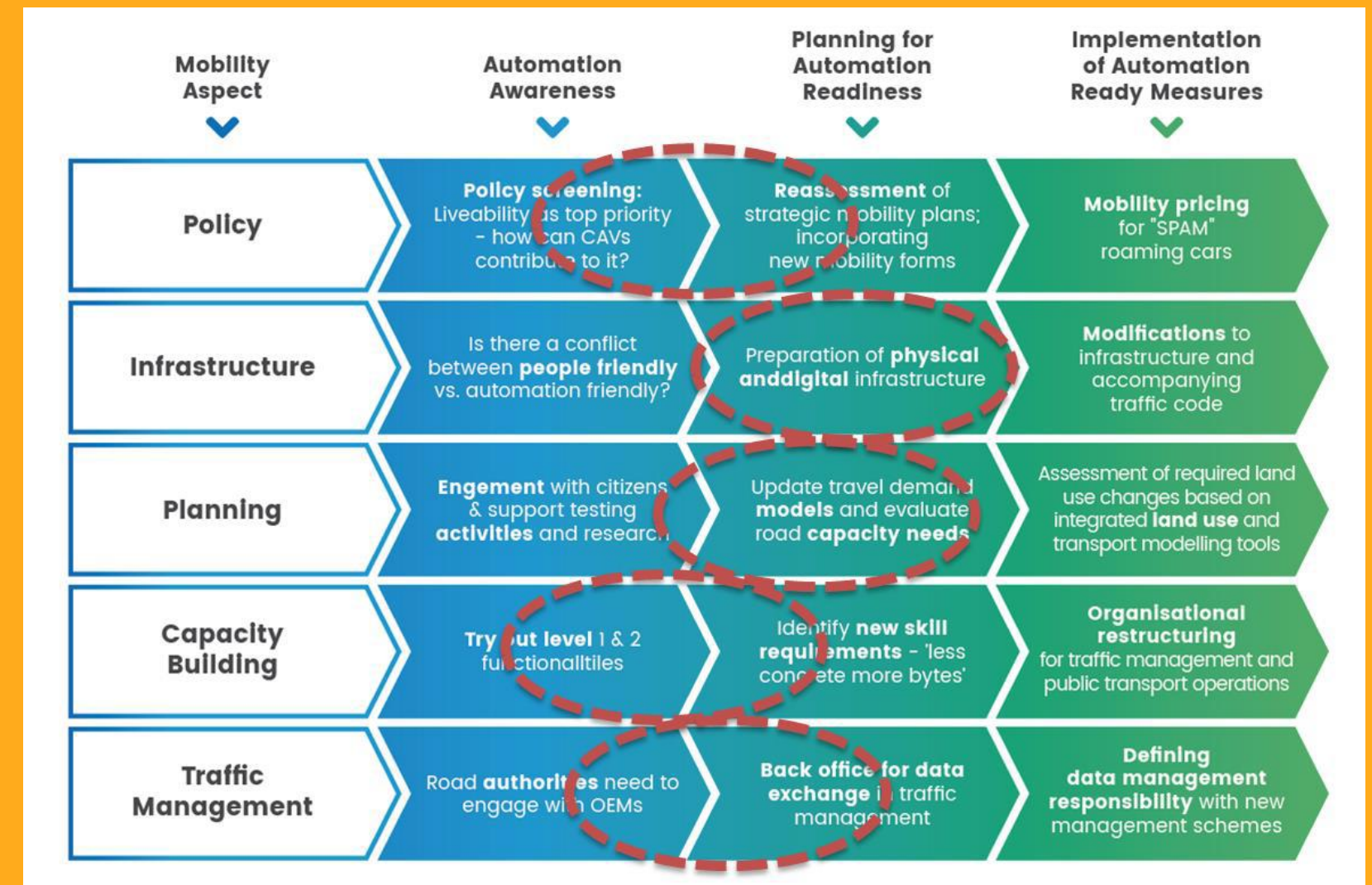
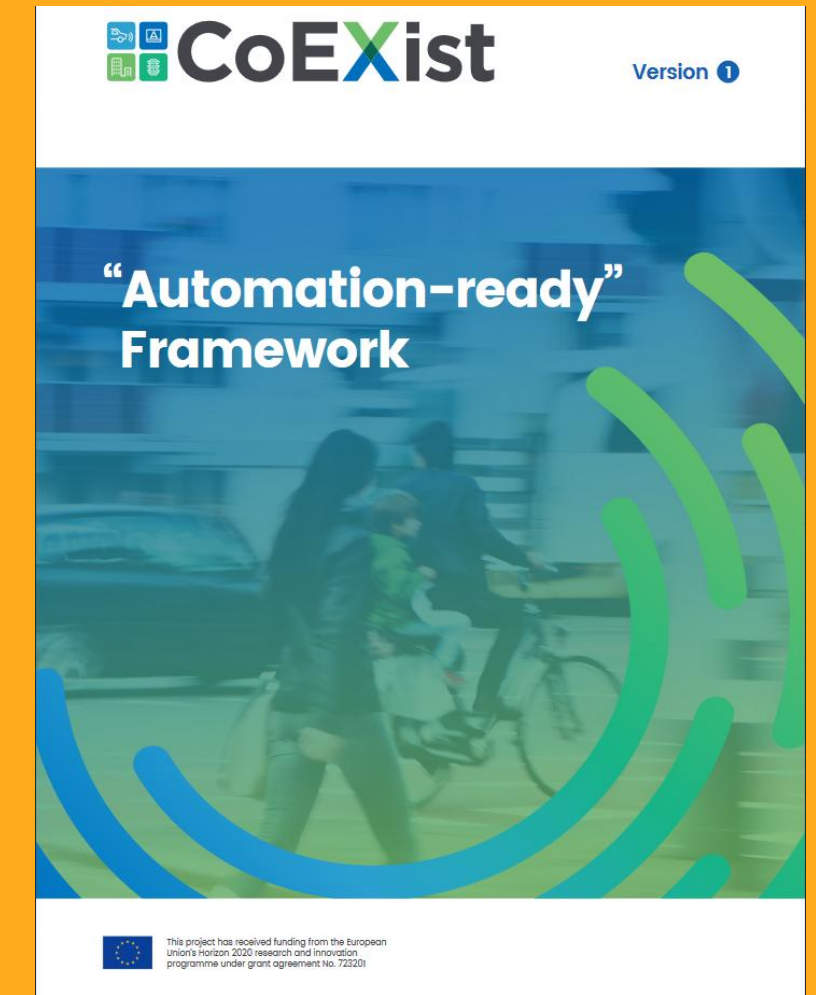
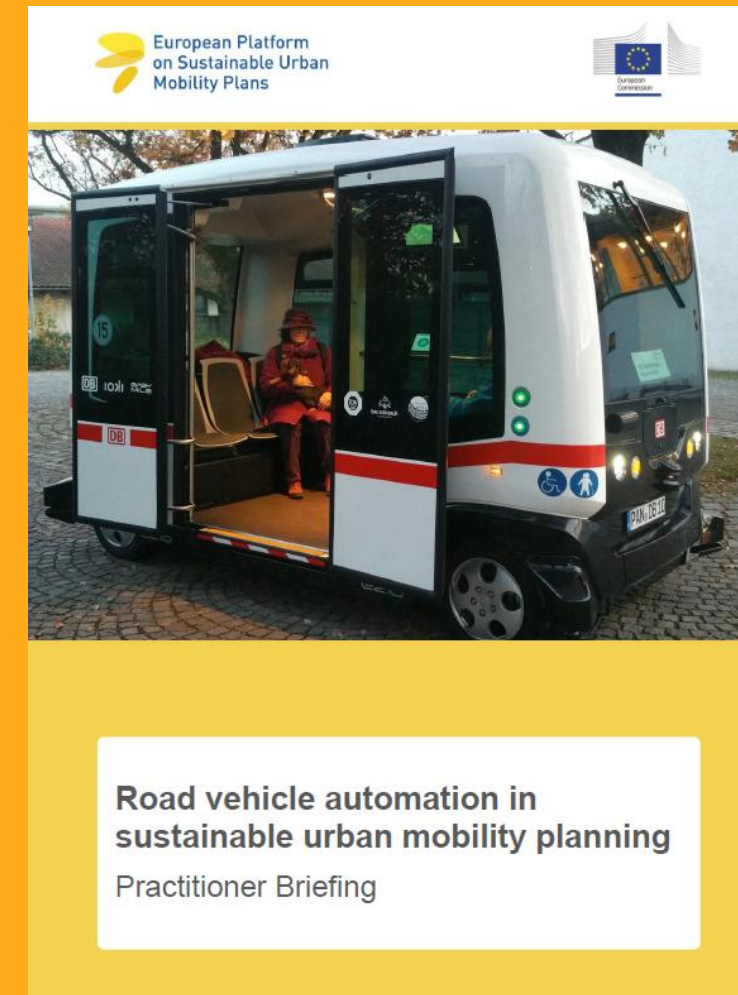
Me & My Organisation



- SUMP Expertise
- Collective and Intelligent Mobility
- Change agents towards CCAM
- Automation-readiness concept



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Did you know?



- To ensure sustainability for CCAM, it needs a holistic consideration as a socio-technical system (individual, social, cultural-spatial aspects).
- Most authorities don't feel well-prepared for the introduction of CCAM.
- Automation-readiness needs “dynaxibility” (ability to act in dynamic, complex and flexible environments).
- Authorities need to be proactive to ensure a safe and sustainable co-existence with other modes of transport for the early phase of the introduction of AVs and transition towards CCAM (where, when, how can AVs drive?) .



Panel Discussion

Q&A - Ask your question



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Thank you!

Do you have any more questions?

Ask our panelists:

Mickael Pero – mickael.pero@cost.eu

Bert van Wee – G.P.vanWee@tudelft.nl

Nick Reed – nick@reed-mobility.co.uk

Nikolas Thomopoulos – chair@wise-act.eu

Wolfram Klar – wolfram.klar@austriatech.at

Wolfgang Backhaus – w.backhaus@rupprecht-consult.eu

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