

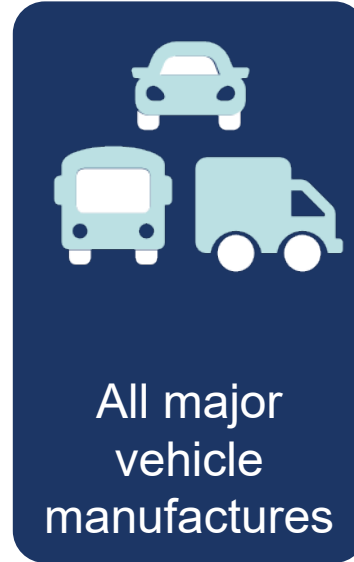


***INTELLIGENT
FUTURE TRANSPORTATION
SYSTEMS***



Presentation of OICA

Organisation Internationale des Constructeurs Automobiles – International Organization of Motor Vehicle Manufacturers



OICA is the voice speaking on automotive issues in world forums



What is ITS

- Facilitator for Interaction of different Stakeholders through Information and communication Technologies
- More participants improves the ITS performance
- ITS regarding Vehicles
 - Vehicle and system requirements today are regulated and harmonized through WP.29
 - If a system relies on safety-relevant vehicle-external parts/information (e.g. backends, HD maps, traffic light sensors etc.) it has to be included in the safety and security assessments for system certification
 - External infrastructure is not part of vehicle regulations in general
 - How can we manage the exchange regarding compatibility of the different entities
 - Example for an ITS: AVP-System

AVP-Type 1
Vehicle sub-system

AVP-Type 2
AVP local sub-system

AVP-Type 2
combination of Vehicle
and AVP sub-systems



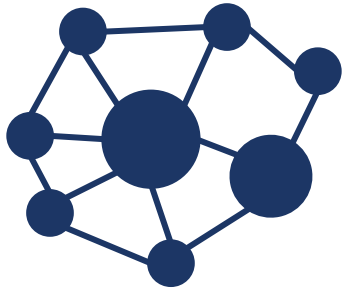
Benefits on ITS

- Improved environment perception - Increasing safety with the 6th sense
- Improvement of Emergency Service
- Better logistics and Traffic flow management (e.g. Platooning) with lead to high efficiency and less pollution
- Parking management
- Seamless usage of public transport and improved combination with individual mobility
- Facilitation of Toll payments



Intelligent Transport Systems – Safety through digital vision

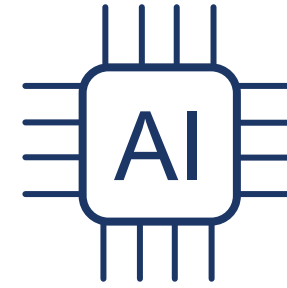
Connectivity



Data



AI

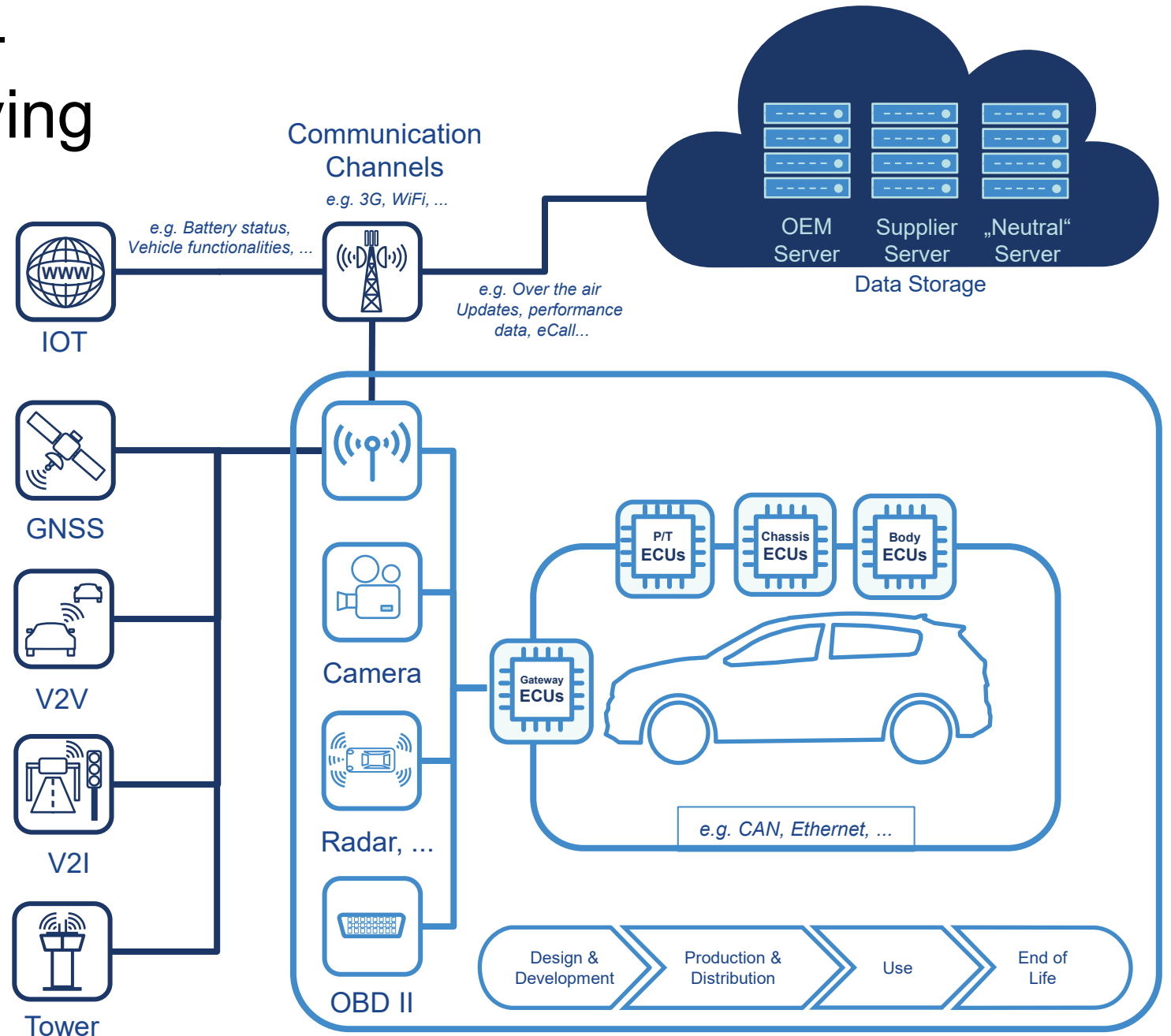


- Protect the lifelines of our modern world
- Road users today drive “on sight”
- Road safety can be greatly increased
- Road users get early and advanced warning on road incidents e.g. with regard to emergency vehicles
- Improve traffic automation (e.g. automated driving)



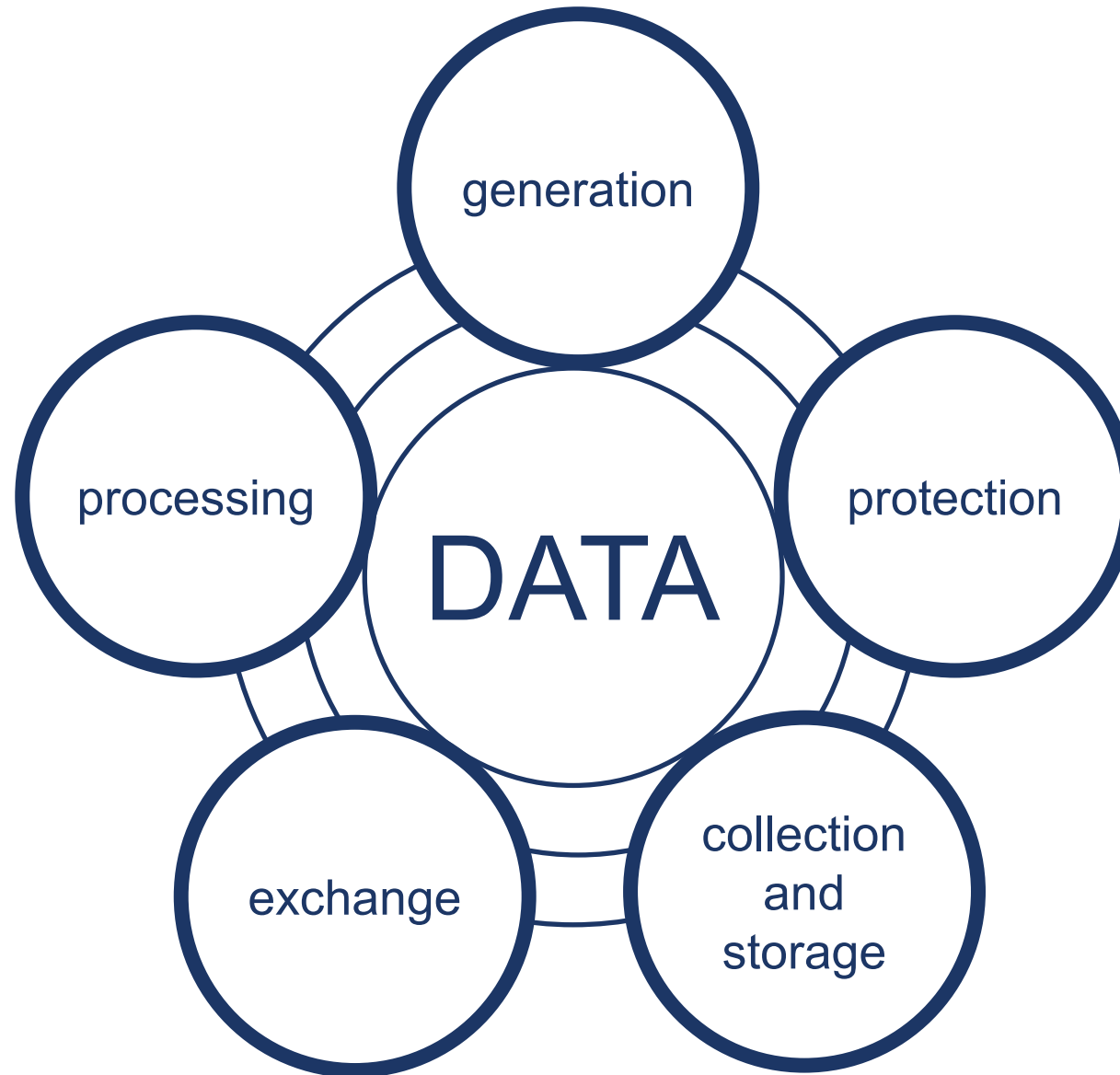
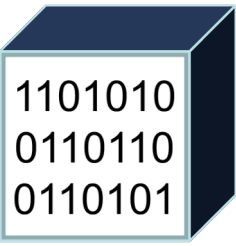
Expand the scope – e.g. Automated Driving

- Intelligent Transport Systems are one of the most important building block for the future of sustainable mobility
- Current vehicle regulation cover parts and systems only (e.g. Automated Driving)
- Single Systems are just **part** of the sustainable mobility in the future
- A expansion of the scope from vehicle and OEM/Supplier to the whole eco-system may be considered and discussed





ITS & Data exchange





ITS & Artificial Intelligence



ITS & Artificial Intelligence

One of the biggest hurdles that AI faces today is public trust and acceptance.



ITS & Artificial Intelligence

ANI

Artificial Narrow
Intelligence

goal-oriented and
programmed to perform a
single task.

AGI

Artificial General
Intelligence

allows machines to learn,
understand, and act in a way
that is indistinguishable from
humans in a given situation.

ASI

Artificial Super
Intelligence

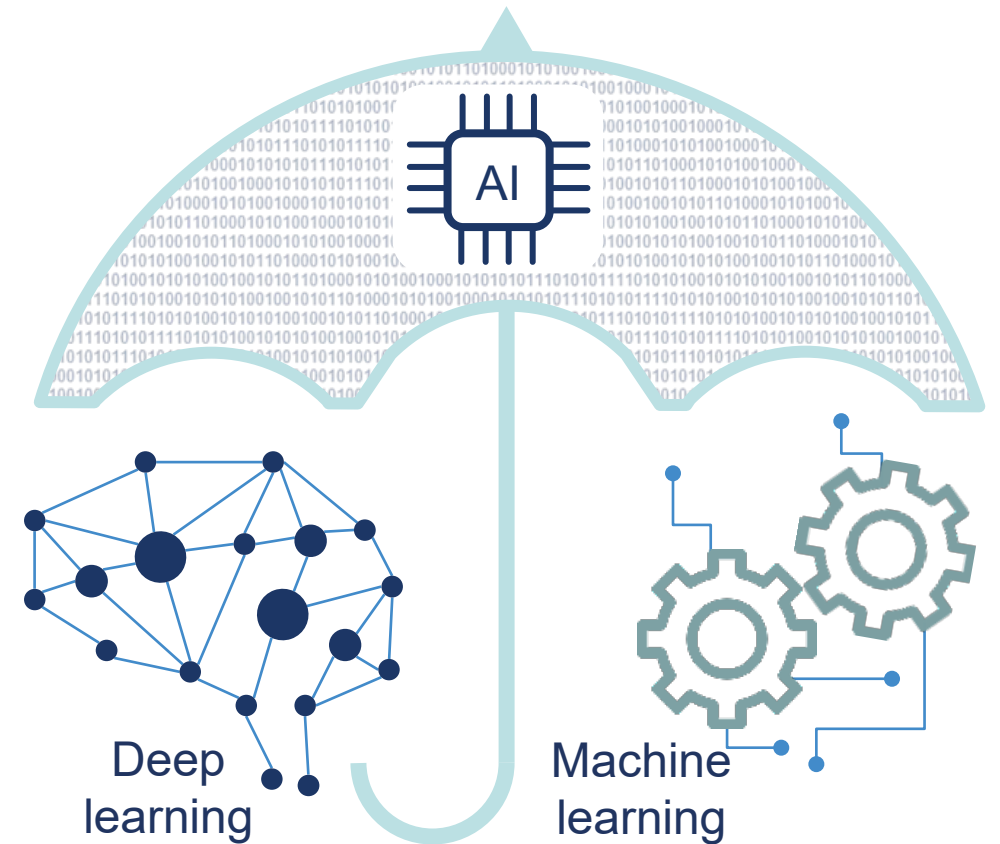
hypothetical AI where
machines are capable of
exhibiting intelligence that
surpasses brightest humans.



ITS & Artificial Intelligence

- AI covers everything related to making machines smarter
- Machine Learning is subset of AI
- Deep Learning is machine learning applied to large datasets

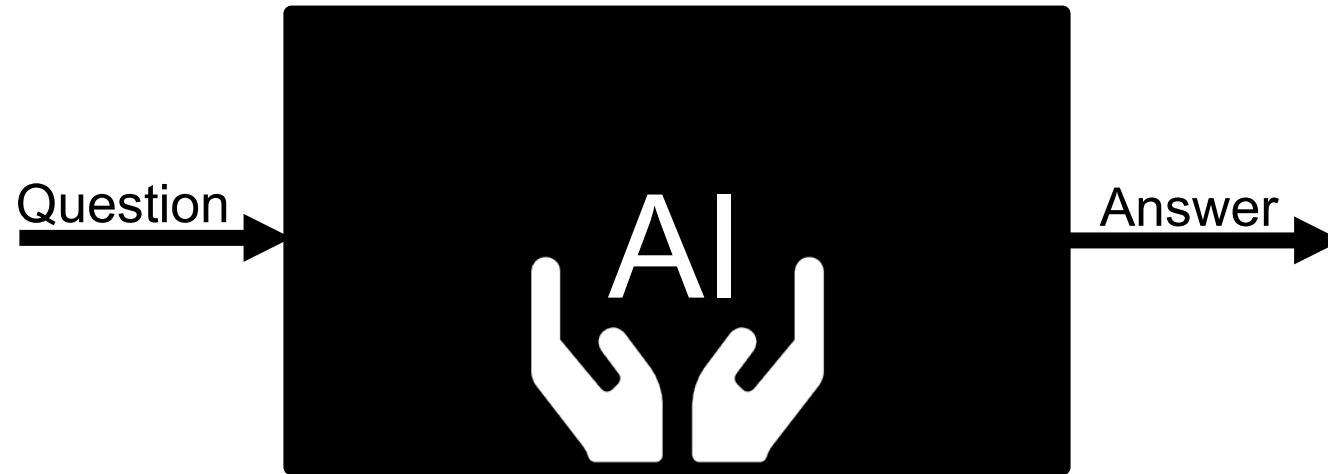
- AI in vehicles - Self learning features





ITS & Artificial Intelligence – Black Box Effect

ITS & Artificial Intelligence – Black Box Effect



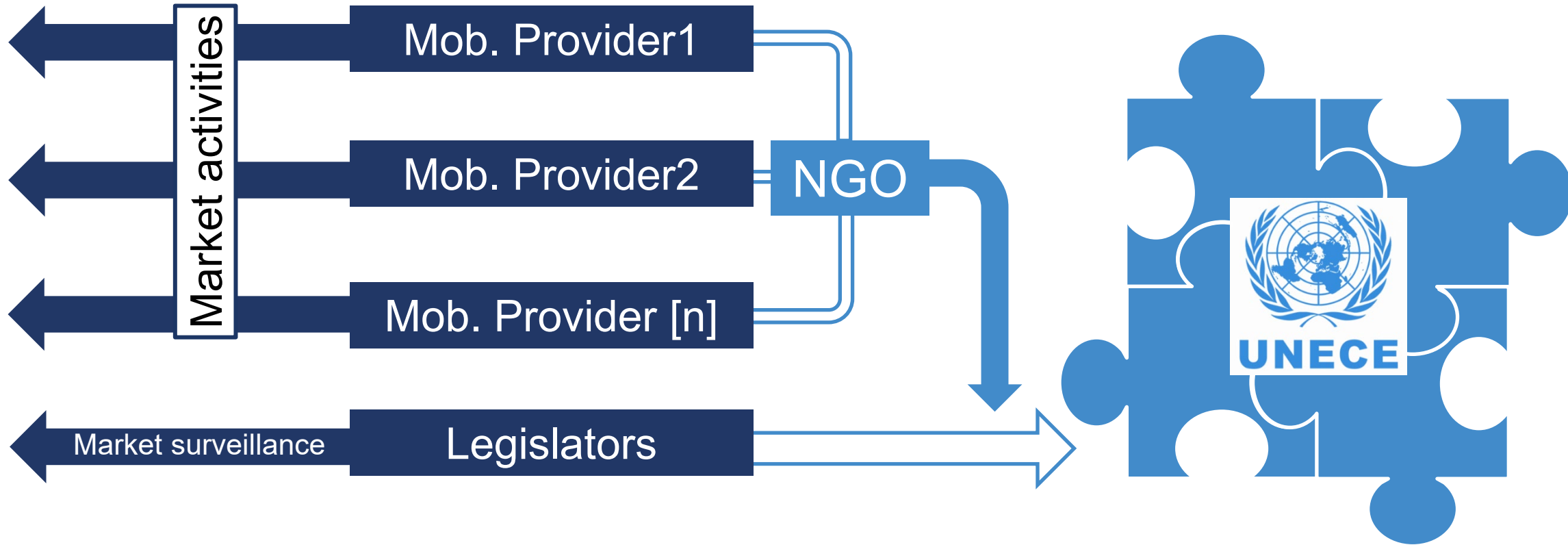


Next Steps of OICA

- Support IWG ITS as experts and consultants for technologies in the mobility industry
- Reaching a common definition on ITS
 - General understanding
 - Terms and Definitions



Competitors and Legislators - stronger together



Individual and independent mobility providers give technical consultance to IWG ITS to reach sustainable mobility

Competitors and Legislators - stronger together

Access to Intelligent Transport Services must be easy and cheap so that as many entities as possible can participate.



Competitors and Legislators - stronger together

Access to Intelligent Transport Services must be easy and cheap so that as many entities as possible can participate.

The more Participants,

the better the system.



THANK YOU