

NOVEMBER 2020

Goggo
Network

ifp
SCHOOL

The Autonomous Mobility Networks
IFP School | ECAV Symposium | 24/11/2020

A TRANSPORTATION REVOLUTION IS UNDERWAY

Old World



Individual and
internal-combustion
engine
transportation



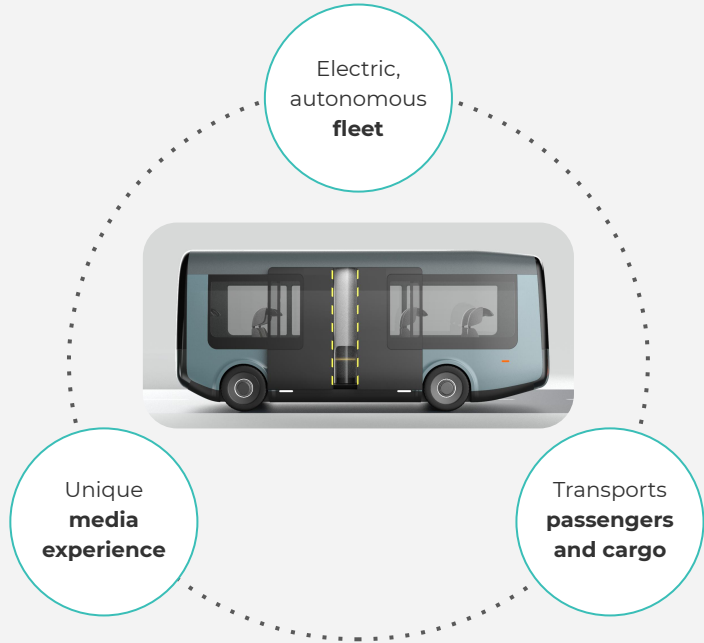
New World

Electric,
autonomous, and
connected fleets
operating a **shared**
ride-hailing
service



**The mobility service of the future will transform cars
into networks: Autonomous Mobility Networks (AMNs)**

WE ENVISION THE FUTURE OF MOBILITY AS AN AUTONOMOUS SHARED NETWORK...



...TRANSPORTATION TODAY: BAD FOR PEOPLE, BAD FOR THE ENVIRONMENT



HIGH PRIVATE VEHICLE UTILIZATION

66%

% of Europeans use a private vehicle to travel⁽¹⁾

LOW OCCUPANCY PER VEHICLE

1.2

passengers per vehicle in Europe⁽²⁾



TRAFFIC IMPLIES MONEY LOSSES

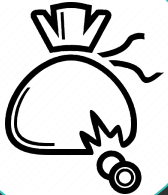
€100 Bn

in costs due to congestion in Europe⁽³⁾

TIME WASTE DUE TO CONGESTION

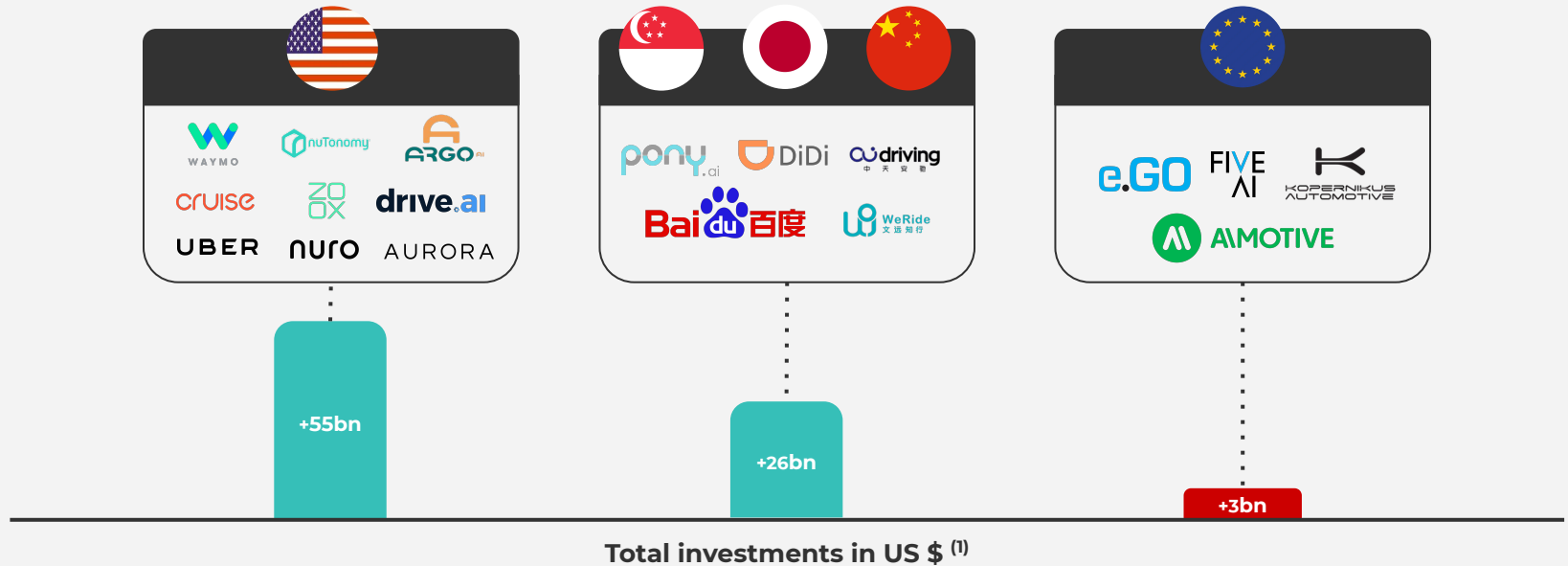
5.5

days spent in traffic every year by Europeans⁽⁴⁾



TO MAKE IT A REALITY, OVER \$80 BILLION HAS BEEN INVESTED IN AUTONOMOUS DRIVING TECHNOLOGIES AROUND THE WORLD

Europe is lagging way behind in the Autonomous Mobility race



(1) McKinsey. The future of mobility is arriving early. Investments in the 2010-2018 period

COVID-19 IS INCREASING THE GAP BETWEEN LEADERS AND FOLLOWERS

Waymo raises another \$750 million for its self-driving car technology amid the coronavirus pandemic

Beijing permits Pony.ai to test autonomous cars carrying passengers

Amazon pourrait s'emparer de Zoox, une start-up spécialisée dans le véhicule autonome

Nuro gets the green light to test driverless delivery robots in California

Volkswagen injecte 2,6 milliards de dollars dans Argo AI, une start-up spécialisée dans le véhicule autonome

Crise Covid: l'autorité des transports publics d'Ile-de-France réclame 2,6 milliards € et un plan de relance

PSA Peugeot Citroën et Renault plongent en Bourse, les immatriculations s'effondrent

Autonomous delivery startup Nuro hits \$5 billion valuation on fresh funding of \$500 million

GOGGO'S VISION

Building a **European Solution** for autonomous driving will **require billions** of investment that none European corporate nor Government can afford.

SOLUTION?

Develop a **Licence based Regulatory Framework** that allows the development of Autonomous Mobility Networks in Europe inspired by the **successful regulation of the telecoms sector in Europe**



The regulation of the telecom industry through a **limited** number of **national** licences, allowed European companies to build a competitive and successful industry, **creating close to a Trillion Dollars of equity value** in Europe and **providing** users **universal coverage**



ONLY A LICENSING SYSTEM CAN SECURE AND FAST TRACK AUTONOMOUS MOBILITY NETWORKS

Benefits	Harmful outcomes if not covered	Homologation -based only	Authorization with EU-limited ownership	AMN licensing system with a limited number of licenses
Meet safety and security standards	A free competition would lead to a price war that would put people in jeopardy. Operators shall not compete on safety nor on security.	✓	✓	✓
Meet social requirements	Universality, privacy by design and a fair pricing can only be achieved through cooperation with the local mobility authorities.	✗	✓	✓
Match the heavy investments needed	Only secured cash flows can enable infrastructure and operations investments needed from day-1. Organic growth would lead to a poor quality of service.	✗	✗	✓
Avoid the risk of winner-takes-all	The network effects - that applies to mobility services - lead to monopoly or duopoly with a risk of critical loss of control for the states if it is not monitored.	✗	✗	✓
Secure organized and stable operations	Unlike the eScooters jungle, people and goods transportation must be organized in a way that complies with its urban environment to ensure quality of service.	✗	✗	✓

Examples include Automotive Ride-hailing Telcos

AMNs BASED ON FIVE KEY PILLARS



Safety

Define a **regulation** that ensures **passenger safety** and **data protection**



Universal and fair access

Ensure **equitable** and **universal service on the territory**



Fair competition

Avoid a **“winner takes all”** scenario



Efficient allocation of public assets

Ensure the **best usage of roads** and other public infrastructure

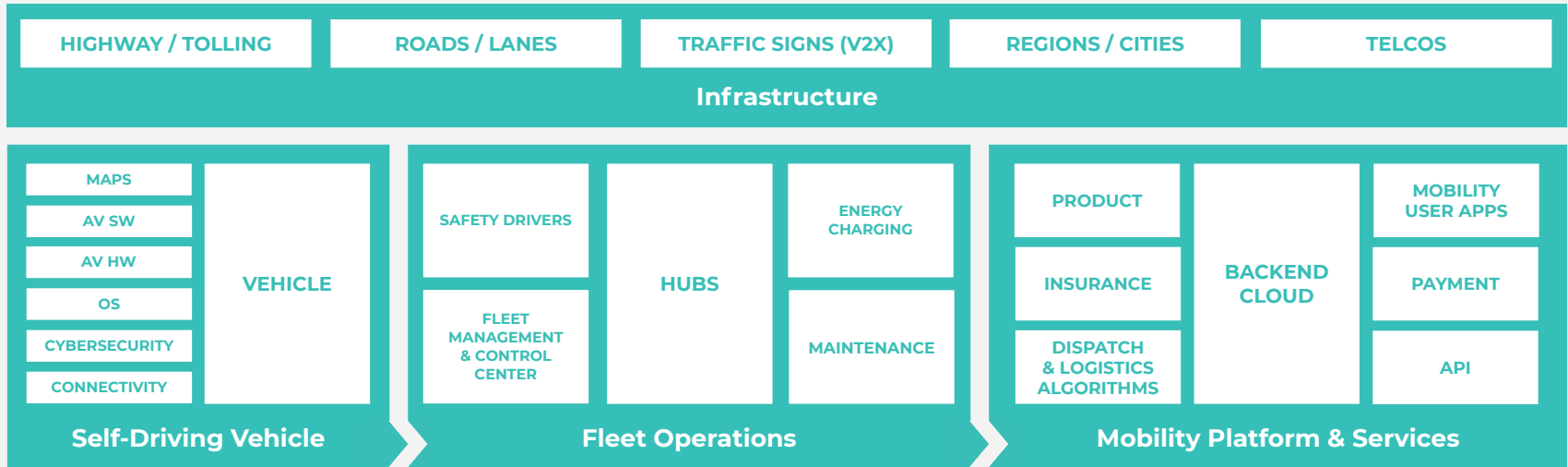


Multidisciplinary Collaboration

Orchestrate the involvement of different stakeholders in a simple manner

AMN | A MULTIDISCIPLINARY CONSORTIUM

1 AD technology + 1 OEM + 1 Operator + 1 Mobility platform



GOGGO'S ROLE AND OBJECTIVES IN THE ECOSYSTEM



GOVERNMENT

Help develop a **Regulatory Framework** for AMNs based on **limited national licenses**



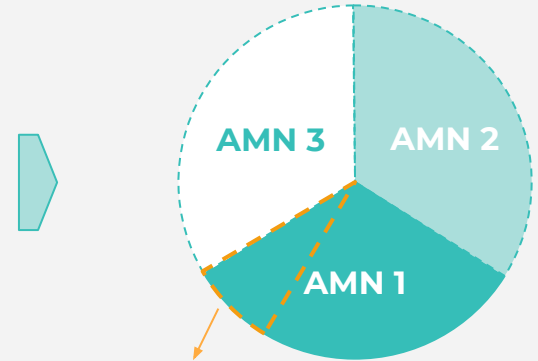
CORPORATES

Build a **Consortium** best prepared to operate a **safe, efficient and sustainable AMN**

Goggo's end goal

Become an **operator** and **win an AMN license**

AMNs market value
for the 3 winning consortia



Goggo's % ownership share of one AMN

IN OUR LATEST SERIES A

€44 million
in funding



Press

LE FIGARO

CincoDías

Börsen-Zeitung

A nighttime city street scene with light trails from cars and buildings in the background. The Goggo Network logo is on the left and the ifp SCHOOL logo is on the right.

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Merci!

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