



GRIMALDI STUDIO  
LEGALE



WAVESTONE

TNO



KOMIS

# 3<sup>rd</sup> Workshop

## Pilot on **Fair and equal data sharing for cooperative, connected and automated mobility**

The planned work on the identification and study of the needed skills for cooperative, connected and automated mobility

Big Data and B2B platforms: the next big opportunity for Europe  
EASME/COSME/2018/004

K. Tzamaloukas  
ICCS-NTUA

EASME - European Commission  
Executive Agency for Small and  
Medium-sized Enterprises



Online Workshop  
23 June, 2020



The planned work  
on the  
identification and  
study of the  
needed skills for  
cooperative,  
connected and  
automated  
mobility

# From the Blueprint to the DRIVES project

## Blueprint for Sectoral Cooperation on Skills

### Automotive

maritime technology  
space - geo information  
textile, clothing, leather and footwear  
tourism  
additive manufacturing  
construction  
maritime shipping  
steel industry  
bioeconomy  
new technologies and innovation in agriculture  
batteries for electro-mobility  
defence technologies  
energy value chain  
energy-intensive industries/industrial symbiosis  
microelectronic manufacturing & design



## From the Blueprint to the DRIVES project



Running from January 2018 until December 2021

24 partners from 11 EU countries

Its broad objectives are to:

- Analyse key trends, covering the whole value-chain
- Define future skills and job roles
- Identify skills gaps for foreseen changes
- Analyse the current offering of training/upskilling/reskilling
- Provide clear guidance for education and training providers

# The future of the automotive industry is sustainable, smart and shared



- Climate Change
- Sustainability
- **Autonomous driving**
- **Connected and shared vehicles**
- Cultural and demographic changes



New job roles

Skills needed

VET- Effective apprenticeships

IBM Institute for Business Values, Automotive 2030 - Racing toward a digital future, Research Insides, 2019

# Refinements on DRIVES project regarding CAV and Services



## JOB ROLES RANKING 1/4

% [BASED ON NORMALISED JOB ROLES RANKING (N° OF TIMES THE JOB ROLE IS NOMINATED)]

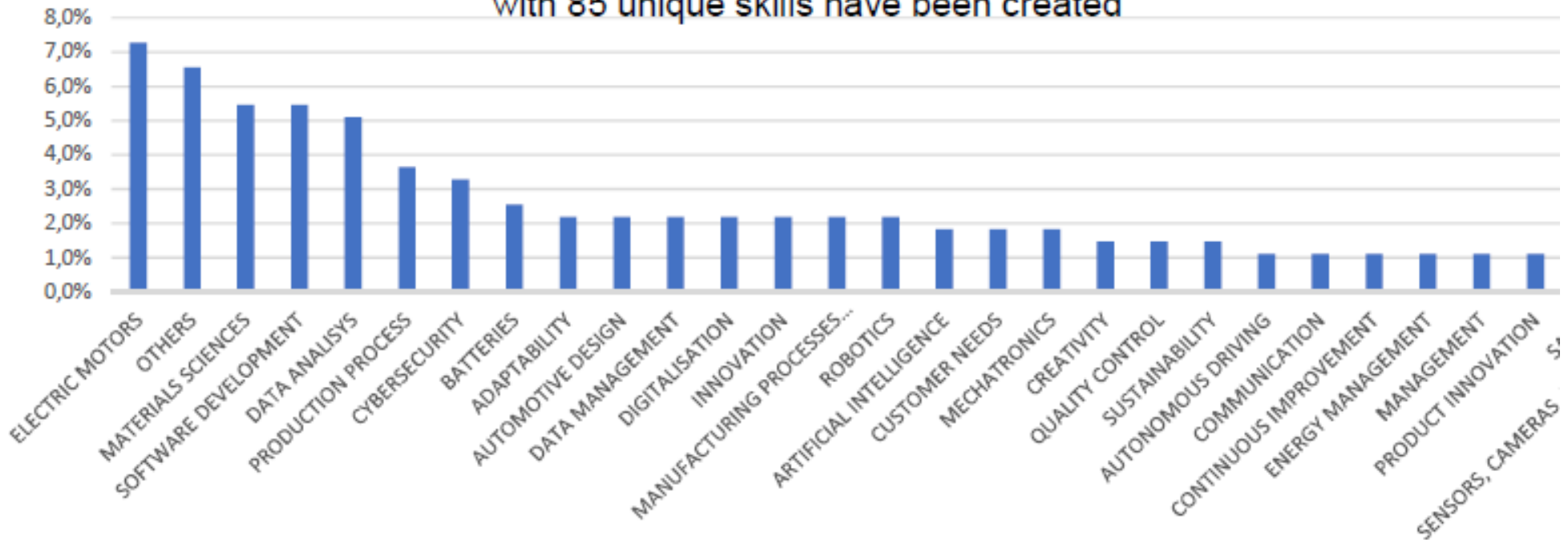
Ranking	Job Role Name	%
1	AUTOMOTIVE DATA ANALYST	6,4%
2	POWERTRAIN ENGINEER	4,9%
3	AUTOMOTIVE TECHNICIAN	4,4%
4	INNOVATION MANAGER	3,9%
5	CYBERSECURITY ENGINEER	3,4%
5	DESIGN ENGINEER	3,4%
5	MARKETING AND BUSINESS DEVELOPMENT MANAGER	3,4%
6	AUTOMOTIVE MANAGER	2,9%
6	SOFTWARE SPECIALIST	2,9%
6	MANUFACTURING ENGINEER	2,9%
7	ELECTRIFICATION ENGINEER	2,5%
7	PROCESS ENGINEER	2,5%
7	SYSTEMS ENGINEER	2,5%
7	MAINTENANCE TECHNICIAN	2,5%
8	ADVANCED MATERIAL ENGINEER	2,0%

# Refinements on DRIVES project regarding CAV and Services



## SKILLS

381 SKILLS have been gathered and normalised  
 A first normalisation has been completed (harmonisation to level I)  
 with 85 unique skills have been created



## Refinements on VET- Effective apprenticeships

It's not a  
consequence  
of COVID-19

### Digital apprenticeships by default

That's imposed by the particular VET objectives

Cloud computing, Software development languages,  
toolkits and methodologies,  
Agile development and PM, Service development,  
Big data management and streaming technologies,  
APIs, Service Oriented Architectures and microservices.  
Big data analytics, Machine learning



## SMEs would start with a strategic workforce planning exercise



...thanks to Romain Siebenaler's article in *EDGEFI Luxembourg*, (Country Manager Cisco Lux.)

- **Investments in complex ICT skills are necessary**

Automotive executives expect the industry to spend over USD 33 billion to reskill their employees by 2030

IBM Institute for Business Values, *Automotive 2030 - Racing toward a digital future*, Research Insides, 2019

- **Develop an ecosystem of relevant assessment reskilling and upskilling solutions where Public-Private Education partnerships is expected to play an increasingly important role concerning skills development and lifelong learning.**

## From the Blueprint and DRIVES project to further refinements

**Blueprint for sectoral cooperation on skills**

### **Automotive Alliances** "SMEunited"

- SMEunited proposed to develop of a platform, the so-called "**Digital Knowledge Centre**"
- Building a competitive data and knowledge economy in Europe: **Digital Innovation Hubs (DIHs)**

Member States and regions should invest in the creation or reinforcement of Digital Innovation Hubs focus on supporting digital transformation in of the Automotive sector part of their national/regional digitalisation strategy

microelectronic manufacturing & design

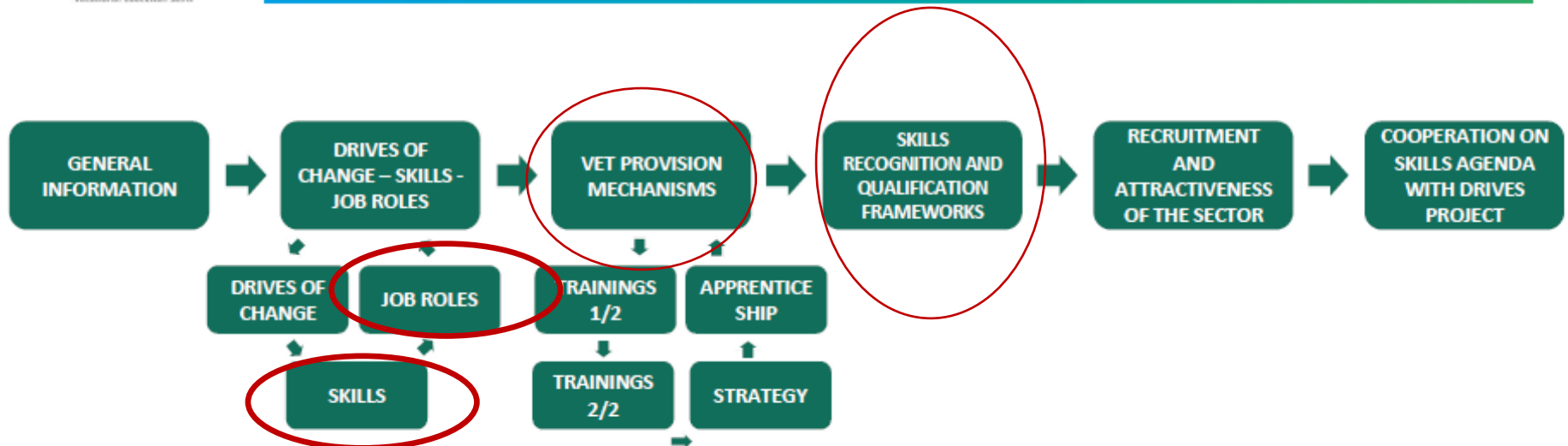
# Refinements on DRIVES project regarding CAV and Services

**Blueprint for sectoral cooperation on skills**

**Automotive DRIVES**



## THE QUESTIONNAIRE



**Needs, Shortage and Training**

