

International Brokerage Event
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Ford Otosan
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Description of the Organization

- Ford Otosan, a joint venture of Ford Motor Company and Koc Group, is a the leading automotive OEM in Turkey, **designing and producing heavy duty trucks**, light/medium **commercial vehicles**, **passenger vehicles** and **diesel engines** for global markets.



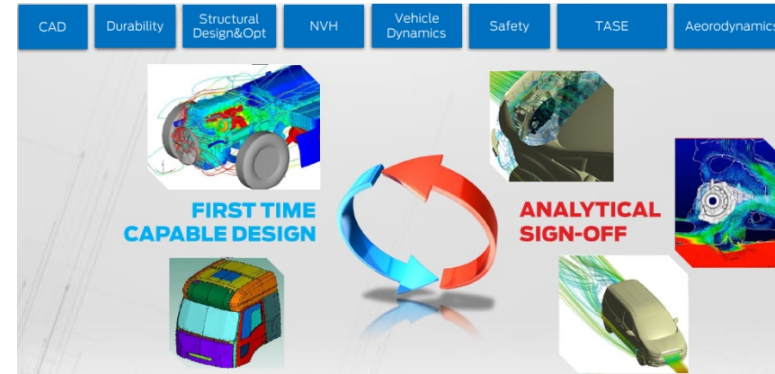
Ford Otosan Capabilities

Design Studio



- Global Hub for HD Truck & PT
- Global Spoke for Light Commercial
- Global Spoke for diesel engines

Vehicle & Powertrain Development



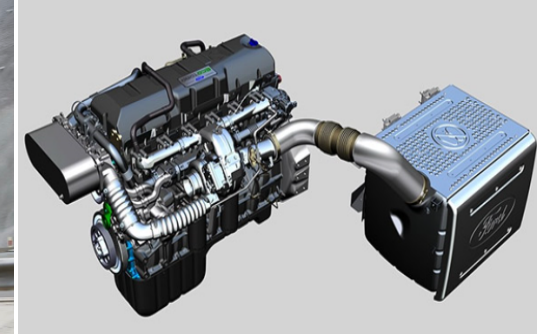
Ford Otosan Locations



Technology Level Exemples

Technology Export

Ford Otosan signed a Technology Licensing Agreement with China's Jiangling Motor Co., a Ford Motor Co. JV, for the manufacture of Ecotorq engines and Cargo trucks under JMC brand.

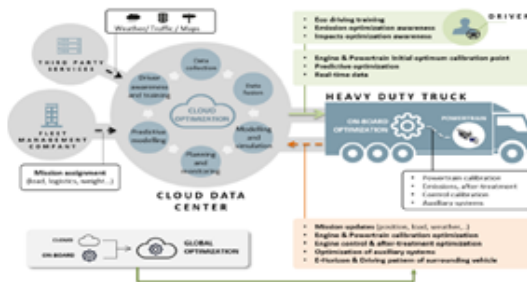


Description of Our H2020 Projects

OPTITRUCK: Powertrain Control Optimization Using Cloud Computing & Model-Based Calibration

Objective:

To combine the most advanced powertrain control and intelligent transport systems technologies for heavy duty long haul truck (40 tons) in order to achieve a global optimum for consumption of fuel and consumables (20% reduction) while still meeting Euro VI emission limits.



Roles and Commitments of FO

- Development and optimization of vehicle control functions
- Supporting development of engine and ATS control functions
- Real-world demonstration of integrated cloud and vehicle software functions

FO Expectations

Utilizing advanced control and ITS* technologies to significantly improve HD truck FE in highway driving conditions

Project Size at FO

Duration : 3 years
End of project: Sep. 2019



*ITS: Intelligent Transportation Systems

Description of Our H2020 Projects



PLATIRUS: Platinum Group Metals recovery *Using Secondary Raw Materials*

Objective:

Reducing the European deficit of Platinum Group Metals (PGMs), by upscaling a novel cost-efficient and miniaturized PGMs recovery process to industrial relevant levels

The targeted secondary raw materials will be auto-catalysts, electronic waste (WEEE) and tailings and slags from nickel and copper smelters, with the potential to substitute a large amount of primary raw materials which are becoming more and more scarce in Europe.

Roles and Commitments of FO

Validation of the PGM containing catalysts that are obtained from the novel recovery process developed by consortium members.

Project Size at FO

Duration : 3 years

End of project: Nov.2019



Description of Our H2020 Projects

Trustvehicle: Improved Trustworthiness and Weather-independence of Conditional Automated Vehicles in Mixed Traffic Scenarios



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Objective:

Safety and end-user acceptance aspects of road automation in transition period.

Main objective is to develop a autonomous HD truck backing feature to enhance road safety.

Roles and Commitments of FO

FO will develop control algorithms for autonomous truck to undertake reverse maneuvering and parking/docking features

FO expectations

Experience in sensor fusion required applications

Project Size at FO

Duration : 3 years
End of project: - June 2020



Description of Our H2020 Projects



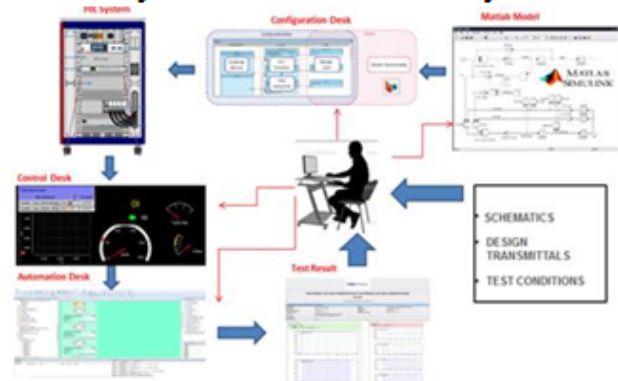
OBELICS: *(Optimization of scalaBle rEaltime modeLs and functional testing for e-drive ConceptS)*

Objective:
Main objectives are developing a systematic and comprehensive framework for the design, development and testing of advanced e-powertrains to reduce development efforts by 40% while improving efficiency of the e-drivetrain by 20%.

Roles and Commitments of FO
FO will develop E-Powertrain HIL, MIL, SIL in the project.

FO expectations
Experience in e-PT HIL, MIL, SIL development

Project Size at FO
Duration : 3 years
End of project: - Oct. 2020



Description of Our H2020 Projects

VISION: (European Training Network on Visible light based Interoperability and Networking)



Objective:

LEDs are widely used in traffic signs, advertising displays, transportation, streetlights etc.

Current research in automotive have focused on the deployment of RF based connectivity.

VisioN foresees the emerging VLC (Visual Light Communication) technology as a candidate wireless technology. Main objective is to develop VLC for two-way vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) communications technology.

Roles and Commitments of FO

FO will hire a researcher and he/she will be trained in Özyeğin University on VLC- Visual Light Communication, while working @ FO on automotive VLC application.

FO expectations

FO will gain experience on VLC as well as other wireless communication techniques for connected truck applications.

Project Size at FO

Staffing in plans: 1 new pers. to be hired
Duration : 3 years
End of project: March 2021

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CENTRALE MARSEILLE

Fraunhofer



Panasonic



**ÖZYEGİN
ÜNİVERSİTESİ**

H2020 - 2018 Calls Interested



- **LC-MG-1-1-2018: InCo flagship on reduction of transport impact on air quality**
- **MG-2-1-2018: Human Factors in Transport Safety**
- **DT-ART-01-2018: Testing, validation and certification procedures for highly automated driving functions under various traffic scenarios based on pilot test data**
- **DT-ART-02-2018: Support for networking activities and impact assessment for road automation**
- **LC-MG-1-4-2018: Hardening vehicle environmental protection systems against tampering**
- **MG-3-3-2018: "Driver" behaviour and acceptance of connected, cooperative and automated transport**
- **LC-GV-01-2018: Integrated, brand-independent architectures, components and systems for next generation electrified vehicles optimised for the infrastructure**
- **LC-GV-02-2018: Virtual product development and production of all types of electrified vehicles and components**
- **ICT-12-2018-2020: Big Data technologies and extreme-scale analytics**
- **LC-SC3-CC-4-2018: Research, innovation and educational capacities for energy transition**
- **LC-SC3-ES-3-2018-2020: Integrated local energy systems (Energy islands)**
- **LC-SC3-SCC-1-2018-2019-2020: Smart Cities and Communities**

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