AGENDA & OPTITRUCK OVERVIEW

Jean-Charles Pandazis
optiTruck coordinator, ERTICO
optiTruck final webinar, 8 October 2019, Brussels

optiTruck is co-funded by the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 713788

Agenda

15:00	optiTruck Project quick overview (4')	Jean-Charles Pandazis (ERTICO, BE)
15:04	Cloud based optimiser (8')	Giambattista Fiume (ICOOR/ POLIBA -UniTS, IT)
15:12	Powertrain optimisation (8')	Kerem Koprubasi (Ford Otosan, TR)
15:20	Demonstration route and validation (10')	Dimitri Margaritis (CERTH/HIT, GR)
15:30	Simulation & results (10')	Engin Özatay (OKAN University, TR)
15:40	Scaling-up (10')	Haibo Chen (LEEDS University, UK)
15:50	Conclusion Q&A session	Jean-Charles Pandazis (ERTICO, BE) Webinar attendies

Overall objective

***opt*imal fuel consumption with predictive *p*ower*t*rain control and calibration for intelligent Truck**

***opti*Truck** goal is to bring together the most advanced technologies from powertrain control and intelligent transport systems in order to achieve a global optimum for consumption of fuel as well as other energy sources and consumables while achieving Euro VI emission standards
for heavy duty road haulage (40t).

*opti*Truck project factsheet

- Started September 2016
- Duration 3 years
- Budget: 5.39 Mio€
- Funding: 4.54 Mio€

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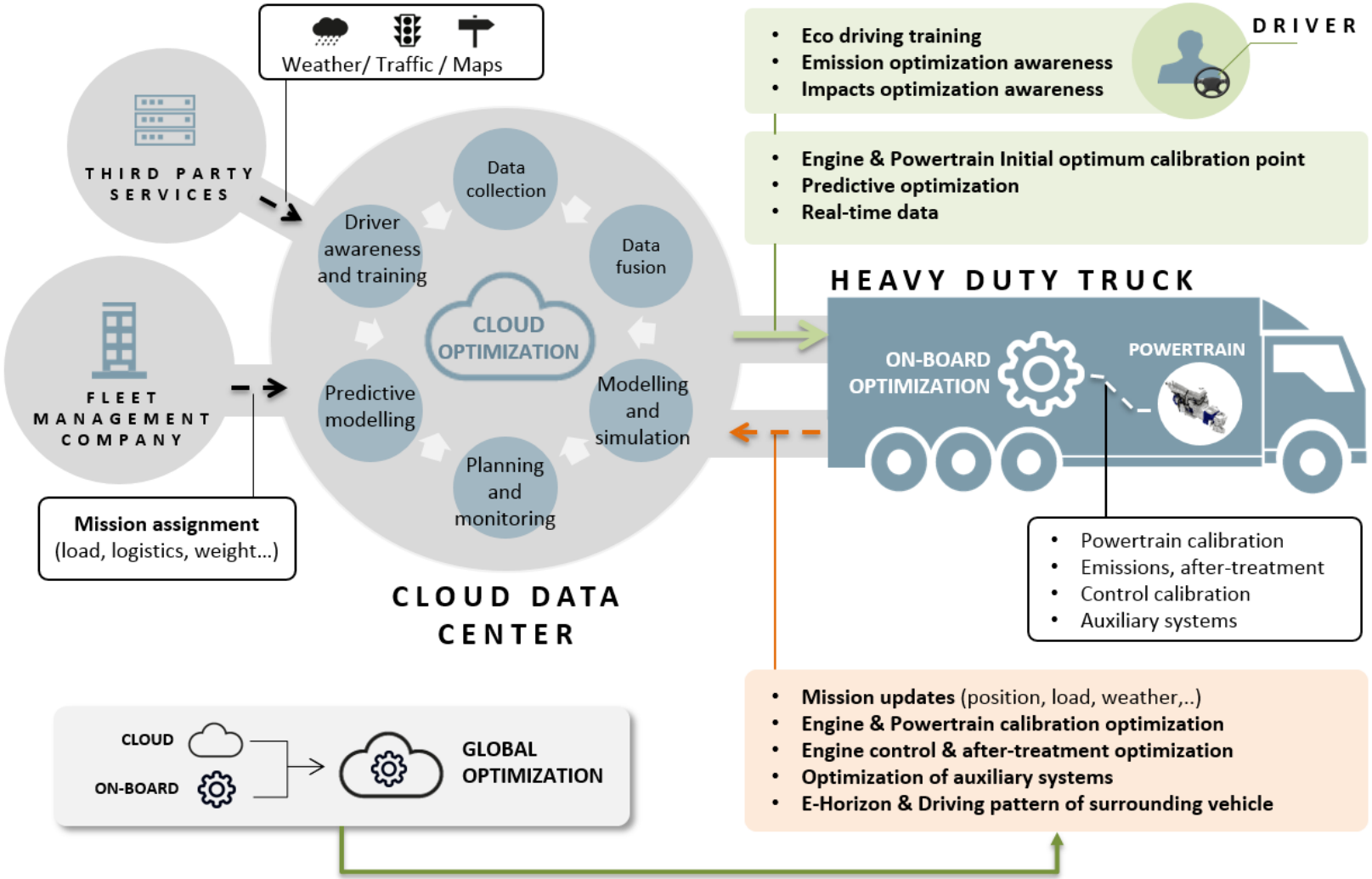
Concept and approach



Driven by 10 Innovation Elements => impact

IEx	Innovation Element description	Foreseen impact
IE1	Optimization of powertrain control and calibration according to real world driving conditions	% 5
IE2	Prioritization of engine operating mode or continuous engine/combustion control together with aftertreatment coordinator function	% 5
IE3	Adaptation to dynamic changes in vehicle load and aerodynamic forces	% 3-5
IE4	Model based aftertreatment coordinator	% 2-3
IE5	Predictive management and control of auxiliary systems	% 1
IE6	Predictive management of the cooling system	% 1
IE7	Energy flow operating mode coordinator	% 1
IE8	Driving patterns of surrounding vehicles: in combination with first innovation action (IE1)	-
IE9	Driver support information system (ecoNavigation or ecoDriving for truck)	% 4-5
IE10	Definition of the transport mission and initial calibration of optimum points	% 5

optiTruck

optiTruck objectives

Objectives	Measure of success
1. Develop truck demonstrator to be tested in real environment	Demo truck ready
2. Develop software component to collect and integrate the different data sources	Cloud SW system ready
3. Carry out real-environment trials with two demonstrators: • One baseline truck equipped with current state-of-the-art techniques; • One truck equipped with the proposed innovations to demonstrate on real road the reduction of fuel and emissions under different transport missions.	Regional trials and International trial performed according to evaluation plan
4. Perform validation & impact assessment to show the minimum 20% fuel reduction	Trials data analysed
5. Develop strategies for larger deployment of the proposed system within and beyond the project	Stakeholder meeting(s), Business scenarios, rollout

- **Questions? use the webinar chat room**

- **Next presentation**

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