

CELTIC EUROGIA Online Proposers Day 15th & 16th September 2020 Pitch of the Project Proposal

SafeTruck

Heavy traffic safety improvements by advanced dynamics and weather service with vehicle



INISH METEOROLOGICAL INSTITUTE





observations

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- The main objective of the project is to improve the traffic safety of heavy vehicle combinations, especially vehicle combinations with tanks to transport liquid goods.
 - Added value:
- 1. Vehicle dynamics analysis, 2. tyre dynamics analysis with tyre development, 3.on-board vehicle sensors and 4.vehicle telematics combined with 5. road weather services
 - Should you participate?
- We seek partners with interests on 1. on-board services for professional heavy vehicles, 2. Vehicle OEM/manufacture, 3.road safety services, 4. on-board monitoring systems with ITS and/or 5.vehicle dynamics and smart tyre

Idea:

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Organisation Profile



Finland's leading expert in weather and safety, and in variety of related environmental issues. Key research areas include development of innovative and intelligent road weather forecasting systems enhancing en-route public safety, delivered both in traditional ways and to user/vehicle devices via wireless networking/cellular systems.

University of Oulu, Machinery Engineering research group : The only university level research group in Finland that is focused on vehicles and transportation. The extensive knowledge on vehicle combination simulations, tyreroad behaviour and vehicle dynamics. Operates a heavy vehicle tyre measuring trailer, that can be used to measure tyre forces.

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Finnish Meteorological Institute:

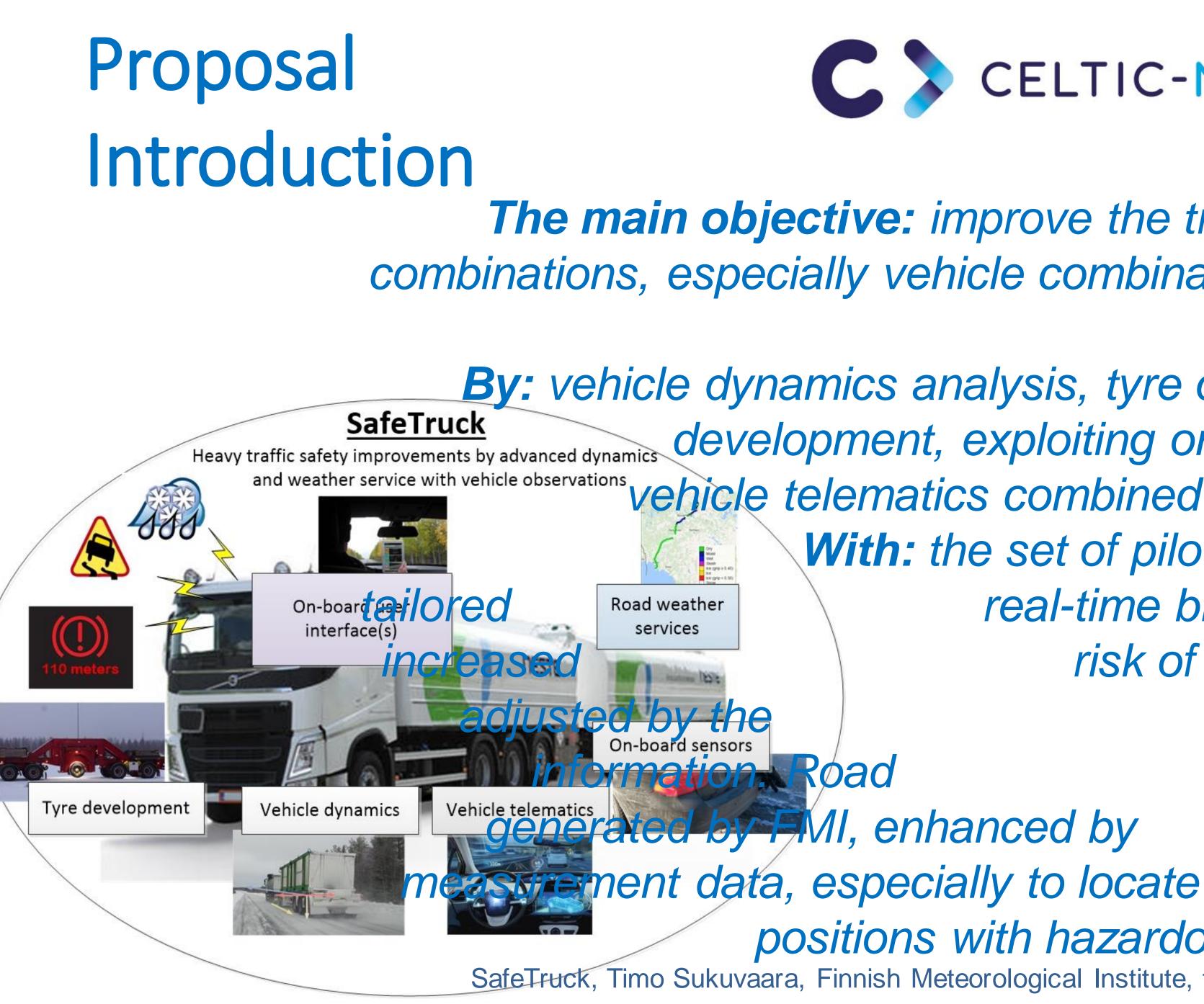












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The main objective: improve the traffic safety of heavy vehicle combinations, especially vehicle combinations with tanks to transport liquid goods.

By: vehicle dynamics analysis, tyre dynamics analysis with tyre development, exploiting on-board vehicle sensors and and weather service with vehicle observations vehicle telematics combined with road weather services. With: the set of pilot services like specific truckreal-time braking distance warning and risk of trailer rollover or sliding out, individual vehicle dynamics weather services load enhanced by vehicular positions with hazardous road weather conditions. SafeTruck, Timo Sukuvaara, Finnish Meteorological Institute, timo.Sukuvaara@fmi.fi





Proposal Introduction



The enhanced road weather services are offered in various propagation channels of Finnish Meteorological Institute.

Road weather service and on-board braking distance- and rollover or sliding out risk-services are combined into the on-board user interface structures, consisting of at least specific user interface tailored for Neste operative truck fleet application user interface, Deal Comp user interface and general mobile application user interface composed for Android mobile phones.

The service combines wide-area road weather service data with real time individual vehicle dynamics estimated in real-time in each vehicle.

36 months projects, expected start in the autumn of 2021 Safe Fruck, Timo Sukuvaara, Finnish Meteorological Institute, timo.Sukuvaara@fml.fi







Sweden: VTI, Chalmers University of Technology, Volvo trucks

We seek new partners from Finland, Sweden and other tackling with harsh winter conditions in traffic, acting as vehicle manufacturers/OEMs, ITS services and communication systems provider/developer, teleoperators or stakeholders of traffic entity. SafeTruck, Timo Sukuvaara, Finnish Meteorological Institute, timo.Sukuvaara@fmi.fi

Existing consortium Finland: Finnish Meteorological Institute, University of Oulu, Nokian Heavy Tyres, Neste, Deal Comp, Kuljetus Hakamäki, Kiitosimeon



Contact Info



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Presentation available via:









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