



Celtic-Plus Proposers Day 20<sup>th</sup> June 2017, Helsinki

## Safe and Secure Vehicular Communication Systems

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# **Organisation Profile**

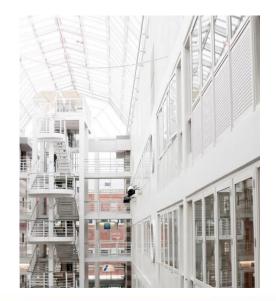


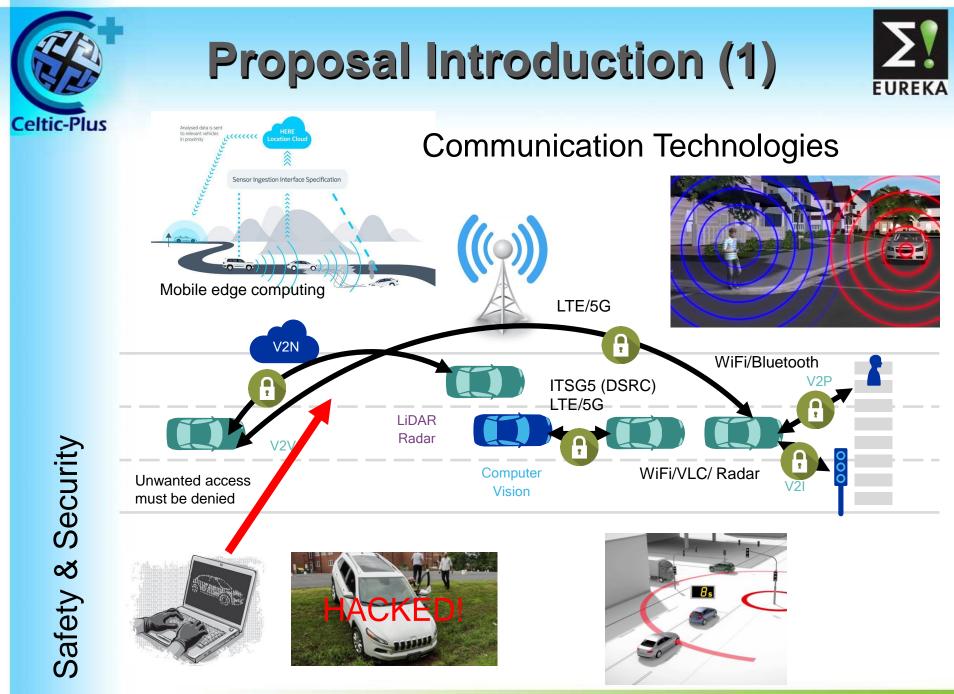
- Mälardalen University (MDH) is located in Västerås and Eskilstuna, Sweden, founded in 1977.
- MDH has 14,000 students and 900 employees with 71 professors.
- Embedded systems is among the most prioritized research areas at MDH, where it has internationally leading competence.





- RISE SICS is a leading research institute for applied information and communication technology in Sweden, founded in 1985.
- 202 Staff (76 Ph.D., 32 Professors)
- Application areas, such as Internet of Things,
  Industrial Automation and Maintenance,
  Automotive and Rail, Telecom, Digital Health,
  Decision support and business intelligence, Data
  Centers.







# **Big Data & Connected Vehicles**



### Volume:

25 GB of data per hour generated from a Plug-in hybrid vehicle



Data generated by connected vehicles compared to data usage of online activities (per hour)

### Velocity:

38 microsecond response to millions of events per second 25,000 MB Vehicle data generated

Source: AT&T, McKinsey, Verizon



### Variety:

80% of data is unstructured – traffic, weather, docs

#### Veracity:

3% - 5% of warranty claims are fraudulent

4



# **Proposal Introduction (2)**



- Expected Outcomes:
  - Safe and secure vehicular communication system
  - New services and efficient operation based on analyzing connected car data
- Impacts:
  - Reduction of pollution (air pollution, noise, ..)
  - Reduction of congestion
  - Increased safety
  - Reduction of transfer cost and Increased transfer speed
  - More services and infotainments
- Schedule:
  - Target for October 2017 call



Looking for partners:

- OEMs
- Telecom industries, network operator
- Universities and research institutes



## **Contact Info**



7

For more information and for interest to participate please contact:



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